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ISSUE 240 DECEMBER 2001 £4.20



December 2001

ACORNUSER

Features

Regulars

Christmas 2001 issue on sale 29th November 2001



If this column could have a headline I would have called this one "ASP has no bite" – but it doesn't, so I can't.

As I said a few issues back it is much easier to predict the failure of something than it's success. The number of times I looked at the concept for a dotcom and immediately said "that won't work", and been right. Strangely, though, they never ask me. (And who are "they" anyway?)

Getting away from the same old Microsoft thing – except to mention that the jolly world-domination giant has put back the deadline for enforcing the new software subscription model until the middle of next year.

It has come to my attention that ASP is a concept that is now understood by most businesses. Application Software Providers originally were supposed to provide application software over the Internet to small and medium sized businesses. In theory this would reduce costs.

But nobody wanted it (I could have told "them") but it now turns out that large enterprises seem to like the idea. This has immediately been turned into "so that means it will filter down to smaller businesses". Frankly I doubt it.

What they now call ASP isn't what it used to be – the concept has been undergoing re-definition in the hope that no one will notice. What we're getting now is really just the installation of a centralised server that provides application software to the network of connected machines – the old thin client model renamed. Usually the server itself is located in the same physical location as the network it serves. It is not off on the Internet somewhere.

An ASP is not an application "software" provider, it is just a "server" provider. Bored now.

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Printed by The Manson Group Ltd, St Albans

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Subscriptions:
(+44/0) 161 429 8902
E-mail: subscrip@acornuser.com
13 issue subscription rate: £45.99 (UK), £51.99 (EU), £63.99 (World)

Acorn User is available as speech from the Talking Newspaper Association UK

Internet Services provided by Argonet, www.argonet.co.uk

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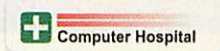
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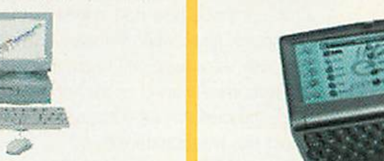
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Flying the graphics flag

Cerilica have launched another graphics application. They lead the field with *Vantage*, their powerful Vector drawing program and *RiScript*, the PostScript and PDF processor. Their new program is much smaller but I'm sure it will find its way onto many of your harddrives. *Insignia* is the latest way to produce easy, but very effective effects with text. Flare effects, half-tones and transparencies will be simple and the resultant logo or word picture can be loaded into *Vantage* for further treatment.

We expect *Insignia* will be launched at the RISC OS 2001 Show which will have come and gone by the time you read this — so expect more comments about the program in the near future in *Acorn User*.

Insignia will cost about £39 from Cerilica

All *Vantage* users should have received a welcome e-mail package by now. Cerilica have not only produced a version with bugs deleted but have also found time to add a number of new features including simulation of metallic inks or foils effects. This goes beyond what Cerilica originally promised (the first release after version 1.00 was intended to be purely bug fixes) so that's good news indeed.

Vantage owners should have received their free copy of version 1.01 before its release at RISC OS 2001.

There are two major Vector graphics applications for RISC OS. *Vantage*, from Cerilica and *ArtWorks* from Computer Concepts but now sold and maintained by Martin Wuerthner. So the two camps ought to be bitter rivals?

Yet another release from Cerilica is a program and an add-on program for *ArtWorks* that allows users to easily transfer their files to a form that can be input into *Vantage*. The utility is written by Martin Wuerthner. That's co-operation.

BatchEPS consists of an *ArtWorks* applet and a stand-alone program. To use you simply drag a directory including *ArtWorks* files and the files will be converted into the *ArtWorks* flavour of EPS which can be loaded into *Vantage*. The process is simple and very quick; and another step to making RISC OS applications ever more useful.

As Cerilica's marketing director has said: you need to be able to use the applications that work best for you and transfer your files between applications to produce the effects you want. It's the RISC OS philosophy and *BatchEPS* at £19.50 is the latest part of that philosophy.

Our final comment about Cerilica this month (we won't mention the special EFF Font CD offer for *Vantage* users because they'll already know all about it) is their release of a third tutorial on their Web site. The first two tutorials are on the software CD and the new tutorial should be copied on top of the first two, after you've copied them onto your harddrive of course.

Some people have encountered an error because a file was protected but this can easily be changed to unprotected in the filer. Cerilica intend to release a tutorial every month onto their Web site and *Acorn User* hope to complement those tutorials with guidance of our own. The tutorials are available from: **www.cerilica.com/vantage/tutorials/**

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XML all over again

If our look at XML (Acorn User November 2001) left you wanting to explore this language (set of rules?) you might want to take a look at some work done by Andy Jackson. He has ported the Expat Utilities and Sablotron XSLT processor to RISC OS. He says he was inspired by Justin Fletcher's ports of XML programs to release some of his own work.

The distribution is at: **http://anjackson.org/poot/riscos/xmlutils/** and there is documentation available on the site that includes examples of how Andy Jackson uses XSLT to ensure a common page-style throughout his Web site.

Meanwhile Justin Fletcher's work with XML can be downloaded from: **http://homepage.ntlworld.com/justin.fletcher/XML/**

XML is to be used to document RISC OS 4, and certain other important companies have been expressing an interest following the article, so perhaps it's worth looking to see what it's all about.



Up your family tree

It's some time now since APDL launched *Ancestor+* and, although it has never reached the requirements outlined by Graham Crow in 1998, it has been a good basic program for production and exchange of family tree data.

APDL have now announced a new version of the program for release at RISC OS 2001 and this is being advertised as a major upgrade. Among other improvements will be a full scrolling view of all or part of the tree and which can be saved as a Drawfile.

Critically the view is dynamic and individuals in the tree can be dragged about and interchanged to alter the order of children and spouses and the links automatically re-drawn.

It's with this dynamic facility that such programs succeed or fail as it is easy to make a mess of the whole tree unless the program is clever enough to trap impossible changes. We will be taking a close look at the new version of *Ancestor+* and we'll be putting it through its paces.

The upgrade is being advertised as costing £20 (with the old *Ancestor+* discs) at the show but prices and availability after the show have not yet been released.

APDL should be releasing details of the program on their site **www.apdl.co.uk**

The first enigma

Last month we promised you a picture of the Enigma machine. Sorry. At the very last minute we had too much (!) news and in our re-organisation of the pages the picture was lost. To make up for your disappointment we're including the picture in this issue.

For readers who missed the last issue the picture is taken from Paul Reuver's program which produces simulations of various Enigma machines. The picture is of a naval M3 machine and the program is available from **www.xat.nl/enigma**



Short stuff

That's what I've got for Rosemary Miskin. If you read my Graphics column you'll see that I mention a problem with the DrawLots program. It's only a small problem and it would probably only effect very few users.

Actually the tense of that last sentence is wrong. It *was* a small problem. I mentioned it to Rosemary and received an updated version of the program within a couple of days. Problem solved and a couple of lessons confirmed for us all. If you notice a problem tell the author (nicely). And make sure that author knows that you appreciate their good work.

The new version is available from Rosemary's web-site: **www.argonet.co.uk/users/miskin**

More friends of RISC OS

Southampton Acorn Users Group have announced that they will be meeting on the following dates:

December 10, January 14, February 18, March 11, April 8, May 13, June 10, July 8.

Their latest meeting was at Itchen College, Middle Road, Southampton at 7pm and admission is free. You will be able to check details of their future meetings by e-mailing: **davehigton@freenet.co.uk** or ringing him on 023 8022 2312.

Bot? Which bot?

Artex Software are obviously concerned that we might forget all about them. Of course we're all waiting for the game TEK and those wonderful people are concerned that we might get bored in the meantime (some chance). Just in case they've released the full version of *BotKiller 2* as freeware.

As someone who hasn't even completed the demo version (sad isn't it?) I'm not the best person to comment on how good the game is — so download it and find out for yourself.

The full version of Botkiller 2 is available from: **www.artexsoft.com** and the level editor is also included (just in case the full game isn't enough), so you can design your own puzzles.

Even more puzzling

Think Puzzle. Think Lizards. Think Repton. Repton, in one form or another, has been with us for 16 years and now there's a new version — Desktop Repton 3, that can be played entirely within the desktop — available on a CD collection together with Repton 3, The Life of Repton, Repton Around the World in 40 Screens and Repton Thru (sorry!) Time. For the first time there's also a multi-tasking level editor.

The Repton CD is available for £14.90 from APDL, 39 Knighton Park Road, Sydenham, London SE26 5RN — 020 8778 2659; e-mail: sales@apdl.co.uk

Design, design, design

Graphics designers out there could be in for a busy time. MyRISCOS have been looking for contributions for a site logo and VOTI are looking for designers and musicians to enhance their games. Now **riscos.org.uk** have announced a competition for a logo for their revamped Web site.

The competition is being hosted by The Icon Bar Web site, where entries in vector graphics format will be displayed, and Castle Technology have donated a copy of *Oregano* for the winning designer. Entries have to be in by the end of November and voting will then commence for a further two weeks.

Entries by e-mail to: **roucomp@iconbar.com**, or by (non-returnable) disk: c/o Melotech, 1 Glossop Grove, Woodhouse, Leeds, West Yorkshire LS6 2LH

Mixed up people

We normally get a rash of notices for the July edition saying closed for Summer Holidays between x and y. Perhaps you can notice the jealousy as we post the following:

The Really Good Software Company (01582 761395) will be closed for their Spring Holiday (!) between 12th November and 12th December. If you want to be really evil to these people you could pester them for your Christmas purchases as soon as they re-open after their trip down-under. Their 24-hour jet-lag may make this inadvisable so to be sure of your presents you may wish to contact them before they leave.

Brain alive

Tiles and *Solitaire* are two educational games from Brain Games that we've mentioned before. They're available in demonstration versions from a Web site but the address has recently changed to: **www.maceng.karoo.net/BG/**

In brief

RISC OS 4+

As we foretold some months ago the new operating system is being released for 'standard' Acorn machines before being tested on other machines such as RiscStations.

Some months ago we said that, although there was no reason to suppose that even the first version of RISC OS 4+ wouldn't work on RiscStations, it hadn't yet been tested on them. It looks likely that the installation program that makes installing RISC OS 4+ easy, will have to be modified slightly to take into account the special features of the Riscstation !Boot directories.

We'll be pressing RISC OS Ltd for more information at the RISC OS 2001 Show so expect more news on this subject next month.

Just Windows

No, not that Windows! Windows, with a lower case w when it doesn't start a sentence, are the areas within which we draw, write and manipulate objects when we're working with the computer desktop.

Some programs ignore the desktop and take over the whole screen. Some people find that very annoying. David Ruck has released a program that provides graphical taskwindows allowing many such programs to run in a window and multitask alongside other programs. They won't take over the whole desktop any longer.

The program is called GraphTask and the latest version is available free from **www.armclub.org.uk/free**

Although they are not new there is a range of other programs in the same area that are worth looking at and that seem to have been hidden away for years. One of them, WorkSpace, now has a permanent place on my icon bar.

Continued...



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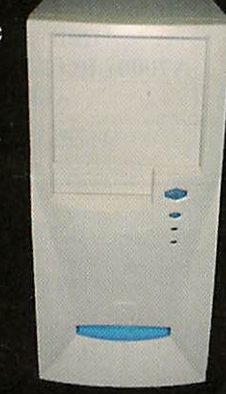


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Watch this Space!



Draw lots in Spokane

I am sure you have all seen the new RISC OS 4+ switcher icon by now. The RISC OS 4 cube has gone and been replaced with an eight-spoke cog. The Acorn green has returned though and the design has received a positive response. For various reasons I have been looking at duplicating aspects of the design and, although I finally tackled the project another way, my first thoughts were to use Rosemary Miskin's *DrawLots* program.

Now I've mentioned *DrawLots* before but it's worth looking at the application again because there's so much included in this little (free) program.

To produce my cog I located the correct tool within the 'curved' set of options in *DrawLots* and looked at the preview option. There were too many teeth in the cog and they were in the wrong proportion; the spokes were either too long or too short compared with the overall diameter.

The cog option allows the inner and outer diameter of the cog to be changed as well as the number of teeth. I set the latter to eight and varied the inner and outer values until the preview image looked about right at about 2.6:4.

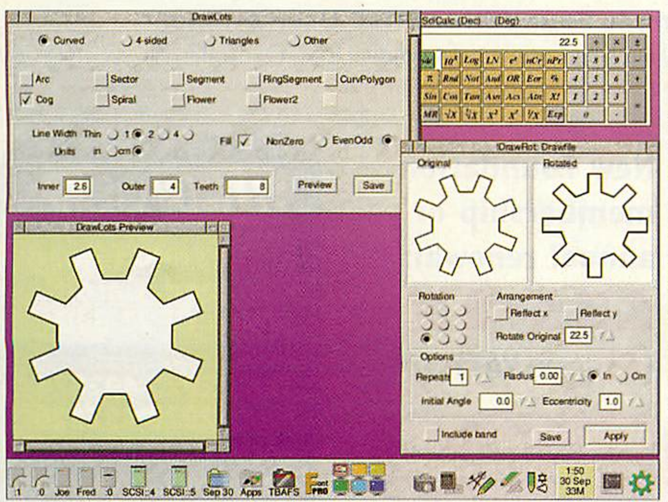
My measurements were in centimetres but I could have chosen inches and obviously that wouldn't have changes the proportions, just the overall size of the object. For all the shapes that it produces *DrawLots* gives options to switch the units of length and vary the line width and the style of fill (or not). What casual users of the program may have missed is the range of options and information that is available for each specific shape — more of which later.

The cog that *DrawLots* produced was wrong. Instead of standing on an individual tooth the *DrawLots* cog rested evenly on two teeth and the drawing needed to be turned through (360 divided by 16) degrees.

Of course I could do this calculation in my head (and 'turn a Logo tortoise through 45 degrees to get an octagon' is imprinted in this IT teacher's brain) but judicious use of *SciCalc* confirmed this to be 22.5 degrees.

I could have turned the cog in *Draw* or whatever other package I used thereafter but, because of other changes that I intended to use, I saved the cog directly into *DrawRotate*, another of Rosemary's programs. Although *DrawRotate* is generally used to arrange multiple copies of a shape it can be set to one copy rotated through, in this instance, 22.5 degrees and the rotated version saved directly into *Draw*, or any other vector graphics program, for further processing.

So much for my project which actually developed into something far more complex. For now I want to look at some of the other options in *DrawLots*.



There are four sections: curved, four-sided, triangles and other. In addition to cogs the curved section also includes arcs, sectors, segments, ring segments, curved polygons, spirals and two flower options. Each section includes nine or ten shapes.

What many users may have missed is the additional information that is displayed for all the four-sided and triangles options. These are of particular interest to anyone producing illustrations that need to be accurate yet produced at speed. Maths and science teachers spring to mind but I'm sure there are any others.

The options in the four-sided section include two parallelograms, two trapezia and two kites. The duplication is to allow for the ways you can produce the shape, for example one parallelogram is produced by setting the base length, height and angle while the other requires the length of the side instead of the height. Whichever option you choose an information box gives the length of each of the four sides and the size of each of the four angles.

The information box is also present when producing triangles where Rosemary has given the user nine ways of defining a triangle although there is, at present, a problem with *IsosTri* — producing an isosceles triangle using base and height lengths.

If you want to delve you can change any of the defaults by amending the details in a text file and, the sign that confirms a good program, Rosemary is always willing to listen to ideas and add new options.

If you haven't used Rosemary's software before then you should have a look at **www.argonet.co.uk/users/miskin/** for these and other excellent programs. RiscStation users already have the *DrawLots* and *DrawRotate* programs on their Resources Disc at **CDFS::RSCD102.$.!SETUP.RESOURCES.EXTRA S.Utilities+.Graphical.Draw** but there are additional programs available on Rosemary's site.

Contacting AU

graphics@acornuser.com
John Cartmell

RISC OS SELECT

Make the right choice for the future with

RISC OS Select

Keep up to date with every new version of RISC OS as it appears!

In future, new updates to RISC OS will be soft-loaded over the existing RISC OS 4 ROM. Distribution will be on CD and via the Internet, making regular updates and the widespread testing of new features far more practical. Join **Select** to be a part of the new scheme and receive up to three RISC OS update CDs per year. All you will need is one or more RISC OS 4 machines on which to install new versions of RISC OS 4.

What does the Select scheme provide?

By joining **Select** you will receive the following benefits:

1. Up to three CDs per year, containing the latest version of RISC OS plus optional beta-test copies of software components in development. Every CD will also be bootable and contain a full, working disc image that allows the easy selection of different boot sequences.
2. Access to interim updates via a private Web site.
3. The ability to upgrade up to **ten** machines at a single site. **Select** is a personal scheme: you only need one subscription even if you own several computers. However, RISC OS 4 is needed for each machine: **Select** cannot be used with RISC OS 3·7 or earlier.
4. **Affiliate Registered Developer** status: if you are a programmer, joining **Select** entitles you to become a Registered Developer for no extra charge, and have your products included in the Database section of **Foundation RISC User** magazine (see below).

RISC OS 4 upgrades and Select scheme prices

Subscriptions to **Select** are available on an annual basis, and may be purchased in combination with a RISC OS 4 upgrade.

RISC OS 4 upgrade plus Select subscription: £179

RISC OS 4 upgrade only *(new low price!)*: **£109**

Select subscription only: £105
(for existing RISC OS 4 users)

Select subscription only: £99
(for Foundation members)

Select group subscription: £300
(for sites with more than ten machines)

All prices above include VAT.

Please see our Web site for further pricing details, overseas prices etc.

RISC OS 4+

Taking RISC OS into the future

RISC OS fans! Join the

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FOUNDATION RISC User








Now in volume 2!

Foundation RISC User is a truly innovative publication from RISCOS Ltd that supports the heart of the RISC OS market. The magazine articles combine useful information with software resources that can be launched with a simple click on a link. Every issue is packed with a wide range of substantial and authoritative features from respected writers, along with a comprehensive and fully integrated database of current RISC OS products, developers and user groups. Altogether, it's arguably the most innovative and high quality CD magazine on any platform.

Testimonials from readers of Foundation RISC User

- "The interface is very friendly and better than my perception of what a CD-based magazine would be like!"—*Andrew Weston*
- "The whole CD is a joy, and something our platform can be proud of."—*Geoff Steeper*
- "The Foundation CD has contradicted my opinion that I wouldn't be able to read a CD magazine happily. It's very nicely laid out."—*Fred Bambrough*
- "Congratulations on Foundation RISC User… it works smoothly, looks good and has masses of useful and interesting content."—*Gavin Wraith*
- "Keep up the excellent work! (And what I REALLY appreciate is someone who can write, spell, talk sense, and knows his its-es and it's-es!)"—*Jeremy Roberts*
- "It's a really excellent job."—*David Pilling*

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sales@riscos.com

Grasping the Nettle

A useful spin-off from the rise in popularity of *Linux* and other *Unix*-like operating systems with present and former RISC OS programmers has been the enthusiasm for porting well-known and often well-loved *Unix* programs for use in the RISC OS environment.

These *Unix* programs are predominantly Internet-related such as *BitchX*, a widely used and heavily modified (IRC) chat client with colour support; *ncftp2* which is a versatile FTP file transfer client, and the easy-to-use *nano* text editor. These all require the use of an ANSI terminal emulator program for input and display in full colour and form.

With the aim to become the definitive terminal emulator and telnet client for RISC OS with just such uses in mind, *Nettle* is being developed by four of the "names" of RISC OS open-source programming. Development was started by Alex Macfarlane Smith, later joined by Ian Jaffray, Joseph Heenan and Peter Naulls, pedigree programmers all.

Nettle currently supports vt100, vt102, vt220 and xterm terminal emulation with planned future support for other common terminal standards. Using the fonts supplied with the popular *Zap* editor, *Nettle* can colourfully and accurately display the ANSI screens of *Arcade BBS*, which is accessible via telnet protocol to **arcade.demon.co.uk** every evening and all weekend.

Peter Naulls has also been working on a RISC OS port of the well-known *Lynx* text-only *Unix* Web browser, which he has recently released to complement *Nettle*. *Lynx* only displays the body text and text hyperlink portion of Web pages and is therefore much faster in operation, and immune to many Web site designers' indulgence in flashy style to content's detriment.



Framed by Fresco

Via *Nettle's* "ANSI task" window mode, *Lynx* uses colour sparingly but intelligently to highlight hyperlinks and separate content from navigation. It's instructive to compare the graphical browser representation of a page with the text version offered by *Lynx*, and happily this example page from the *Arcade BBS* Web site acquits itself well in compatibility.

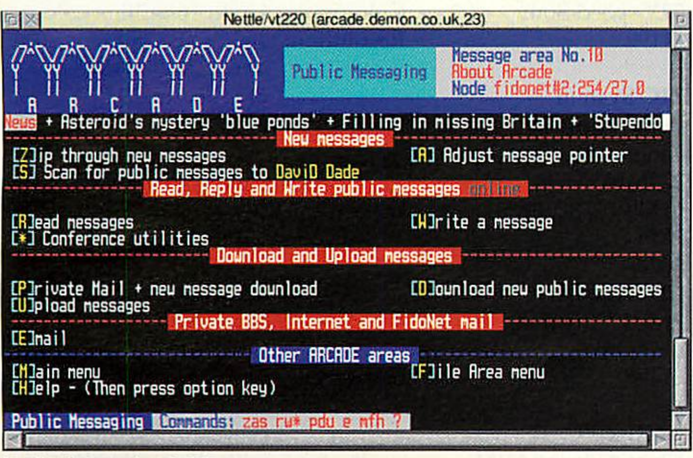

Looking with Lynx

Buy now

Not nearly as successful at compatibility are pages from a graphically intensive site such as this **comet.co.uk** front page. You can download *Lynx* and a number of other *Unix* ports from Peter Naulls' Web site at **www.chocky.org/unix/** You'll probably need to increase the RISC OS Task Manager "Next" Application tasks slot to about 1.5Mb before *Lynx* will run via the *Nettle* terminal.

Buy nothing at all

Nettle can be downloaded from **http://nettle.sourceforge.net/**



Nettle telnets to Arcade BBS

In brief

Keep it simple

SimpWeb started as a programming exercise but is a useful utility for conversion of text files into simple HTML format either as stand-alone HTML pages or segments for cut-and-pasting.

Program options also allow absolute text size to be set, sub-headings to be emphasised, and conversion to unordered bulleted list format.

SimpWeb
www.greywall.demon.co.uk/riscos/soft.html

Goonhilly on the roof

If you can still remember that old flickery TV demo of Telstar, the first communications satellite link, you'll be amazed at the latest technology from Beam™ that provides a two-way always-on broadband Internet connection from a dish to an Internet satellite 35,800km above the Equator.

Installation for a single user offering up to 400Kbps downlink and 128Kbps uplink, costs about £150 with a monthly fee of £149 and a hefty hardware price of £500 all exc. VAT; actual prices are set by the installer.

Beam Broadband
www.broadband4uk.com
Tel: 0845 0800452

Site Seeing

Web_Gen by Dave Stratford is an HTML composition tool that makes a Web site from a directory of TIFF, JPEG, GIF, BMP or Sprite images. *Web_Gen* offers three styles of site; a page of thumbnails, a thumbnail page linked to full-size images with forward / backward navigation and optional captions, or a single Javascripted page with thumbnail roll-overs that pop open their full-sized images beside them.

Page title, heading text, author, page date and image sizes can all be set from the settings window.

Web_Gen
www.argonet.co.uk/users/daves/software

Contacting me

David Dade:
comms@acornuser.com

Choose your

Currently there are three and a half companies building RISC OS computers with a wide range of options and prices. There are the big three Castle Technology, RiscStation and MicroDigital, with the "half" being APDL. The reason for referring to him as a half is that the boards are being supplied by MicroDigital while APDL is supplying many of the major components (like hard drives) in order to keep the overall price as low as possible.

The information supply is what the companies themselves are promoting as their main products. Things can change and often do, semiconductor prices come down or hard drive prices go up, certain sizes of hard disc may become unavailable — currently it is hard to buy a hard disc of less than 4.2Gb.

All of these machines use RISC OS, most come with RISC OS 4, some with 3.7 although that is intended mainly for schools who like to keep their systems standard.

All the machines come with pre-loaded software sometimes this is given explicitly but, if in doubt, contact the company concerned and they will be happy to let you know what they supply as standard. Every machine comes with serial and parallel ports, keyboard and mouse but monitors will be extra unless specified. All the machines have a 1.6Mb floppy drive although RiscStation do have options on that.

Finally we are not comparing machine speeds here just looking at the different types. So without further preamble let us take a look at what the players have to offer.

Castle Technology

With the biggest range of specific machines Castle produce the machines with the fastest processor (the Kinetic series) and all the Acorn-badged machines. For sound all of these machines have CD-quality 16-bit 44.1KHz stereo digital sound system with a mixer for second internal audio source (for example the CD ROM) and an internal speaker. Sound output is through a 3.5mm stereo jack socket.

The Kinetic range

The following features are found on all the Kinetic range of computer systems.

OS: RISC OS 4
Colours: Up to 16 million colours
Resolution: 1600 x 600 (more with optional Viewfinder graphics card)
Network: Optional upgrade, 10baseT/10base2 "nic" style network card
Expansion: Optional upgrade, up to 16 standard Acorn-style "podules", seven free 5.25in drive slots and seven free 3.5in slots.
Software: Oregano Web browser, Easiwriter word processor (compatible with Word), Resultz spreadsheet (compatible with Excel) and more

KINETIC300
Christmas 2001 Special
Processor: Kinetic StrongARM
Speed: 300Mhz
Fast SDRAM: 64Mb
VRAM: 2Mb
Hard drive: 30Gb
CD ROM drive: 52X speed Sony
Price inc VAT: £1199

CDwriter KINETIC System
(includes 17" Iiyama monitor)
Processor: Kinetic StrongARM
Speed: 233Mhz
Fast SDRAM: 64Mb
VRAM: 2Mb
Hard drive: 30Gb
CD ROM drive: CD ReWriter
Plus: Free 17" Iiyama monitor
Price inc VAT: £1499

KINETIC Internet Risc PC
Processor: Kinetic StrongARM
Speed: 233Mhz
Fast SDRAM: 128Mb
VRAM: 2Mb
Hard drive capacity: 30Gb
CD ROM drive: 52 speed Sony
Plus: Free Internet pack 56k modem
Price inc VAT: £1408.82

DVD KINETIC Risc PC
Processor: Kinetic StrongARM
Speed: 233Mhz
Fast SDRAM: 64 Mb
VRAM: 2Mb
Hard drive: 10Gb
CD ROM drive: Sony DVD
Price inc VAT: £1173

Ek KINETIC Risc PC
Processor: Kinetic StrongARM
Speed: 233Mhz
Fast SDRAM: 32 Mb
VRAM: 2Mb
Hard drive: 10Gb
CD ROM drive: 52 speed Sony
Price inc VAT: £1099

Acorn Risc PC systems

These systems are based on the final Acorn designs although there have been some modifications to the motherboards to remove some problems and introduce improved features. All these systems have:

OS: RISC OS 4 (RISC OS 3.7 option)
Colours: Up to 16 million colours
Resolution: 1600 x 600 (more with optional Viewfinder graphics card)
Network: Optional upgrade, 10baseT/10base2 "nic" style network card
Expansion: Optional upgrade, Up to 16 standard Acorn-style "podules", seven free 5.25in drive slots and seven free 3.5in. Bottom two slots are 32-bit EASI.
Software: *Oregano* Web browser, *Easiwriter* word processor (compatible with *Word*), *Resultz*

weapon

We summarise the computers that you can buy from the current RISC OS dealer network

spreadsheet (compatible with *Excel*) and more supplied.

Acorn StrongARM CD
Processor: StrongARM
Speed: 233Mhz
Memory: 32 Mb
VRAM: 2Mb
Hard drive: 8Gb
CD ROM drive: 52 speed Sony
Price inc VAT: £1032

Acorn StrongARM HD
Processor: StrongARM
Speed: 233Mhz
Memory: 16 Mb
VRAM: None
Hard drive: 4Gb
CD ROM drive: None
Price inc VAT: £938

Acorn StrongARM Entry level
Processor: StrongARM
Speed: 233Mhz
Memory: 8 Mb
VRAM: None
Hard drive: 2Gb
CD ROM drive: None
Price inc VAT: £880

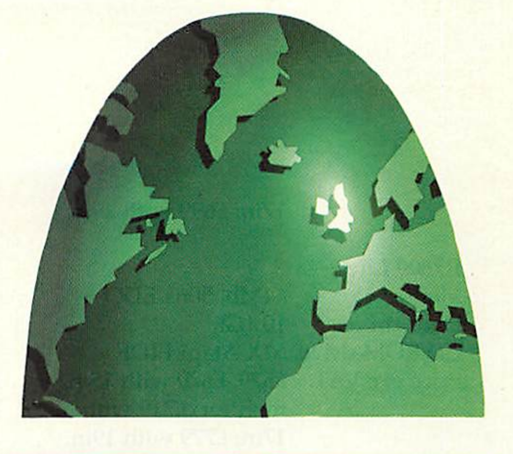
A7000+ Odyssey Range

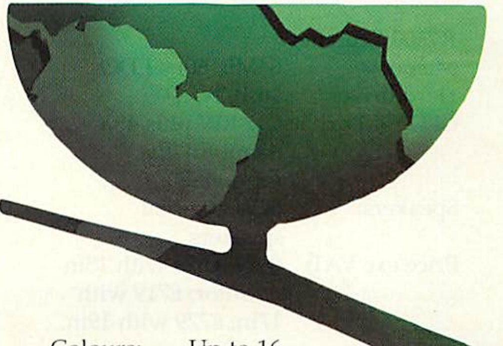
These are smaller systems physically although still comfortably fast, they do suffer from less expansion capabilities.
Processor: ARM 7500FE
Speed: 56Mhz
OS: RISC OS 4 (RISC OS 3.7 option)
Colours: Up to 16 million colours
Resolution: 1600 x 600 x 256 colours (more with optional Viewfinder graphics card)
Expansion: Optional upgrade, one standard Acorn-style "podule" (but can only be used if no CD fitted)
Software: *Oregano* Web browser, *Easiwriter* word processor (compatible with *Word*), *Resultz* spreadsheet (compatible with *Excel*), and more supplied

A7000+ Odyssey Surf
Memory: 24 Mb
Hard drive: 4Gb
CD ROM drive: 52X speed Sony
Free hardware: 56k modem
Price inc VAT: £703

A7000+ Odyssey Secondary
Memory: 24 Mb
Hard drive: 4Gb
CD ROM drive: 52X speed Sony







Free software: Secondary pack
Price inc VAT: £703

A7000+ Odyssey Primary
Memory: 24 Mb
Hard drive: 4Gb
CD ROM drive: 52X speed Sony
Free software: Primary pack
Price inc VAT: £703

A7000+ Odyssey CD
Memory: 16 Mb
Hard drive: 4Gb
CD ROM drive: 52X speed Sony
Free software: Primary pack
Price inc VAT: £645

A7000+ Odyssey HD
Memory: 8 Mb
Hard drive: 1Gb
CD ROM drive: None
Free software: Primary pack
Price inc VAT: £527

A7000+ Odyssey Network
Memory: 8 Mb
Hard drive: Disabled
CD ROM drive: Disabled
Network: 10baseT/10base2
Free software: Primary pack
Price inc VAT: £527 (or £468 for RISC OS 3.7 version)

RiscStation Ltd

Using hardware designed by Simtec, RiscStation is a complete departure in design from the original Acorn ideas. Simtec have incorporated far more facilities in hardware giving machines with interesting capabilities.

However all the available machines are based on ARM7500 chips simply because these have the important "glue" chips onboard with the processor. However these have a top processor speed the same as Castle's Odyssey range.

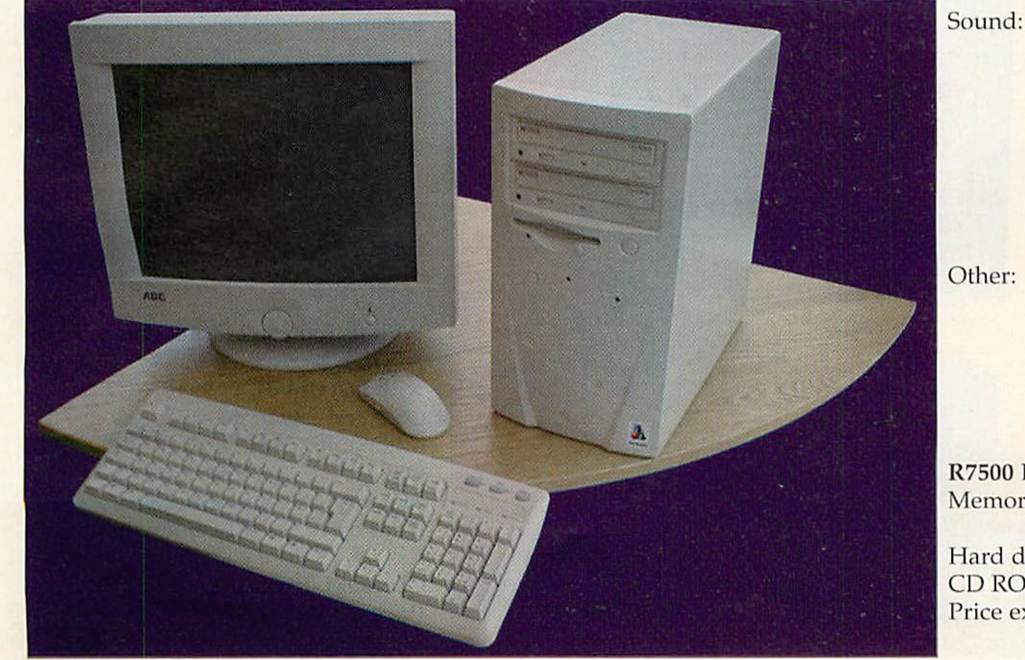
That said there is more to computers than processor speeds and these machines can operate at comfortable user speeds — you won't notice them being sluggish for normal operations.

RiscStation do have a design waiting in the wings to take advantage of faster processor speeds, unfortunately this depends largely on modifications to RISC OS itself which may not happen for some time.

All of RiscStation's machines have the following as standard:

OS: RISC OS 4

Colours: Up to 16 million colours
Resolution: 1600 x 1200 x 256 colours
Ports: 2 serial ports; 1 game port including MIDI In/Out; 2 EIDE ports for up to four devices; 10baseT network port with "Wake On LAN" support; Parallel port is fast EPP/ECP.
Sound: 16 bit OPL3 stereo sound *sampler* and mixer, with FM synthesiser, MIDI, Wavetable and two CD channels. External connection for line in, mic in and headphone/speaker out.
Other: Zip and LS120 drive formats are supported natively and these drives can replace the floppy drive



R7500 Lite
Memory: 16Mb, 60ns EDO, can be 50ns or faster
Hard drive: 4.3Gb
CD ROM drive: 48X Atapi EIDE
Price exc VAT: £499; £599 with 15in monitor; £639 with

17in; £699 with 19in.

R7500 Lite+
Memory: 64Mb, 50ns EDO
Hard drive: 10.1Gb
CD ROM drive: 52X Atapi EIDE
Price exc VAT: £579; £679 with 15in monitor; £719 with 17in; £779 with 19in.

R7500 Scorcher
Memory: 64Mb, 60ns EDO
Hard drive: 10.1Gb
CD ROM drive: CD-RW plus 48X Atapi EIDE (optional)
Speakers: 60W external speakers
Price exc VAT: £579; £679 with 15in monitor; £719 with 17in; £779 with 19in.

R7500 Networx
Memory: 8/16Mb, 60ns EDO
CD ROM drive: CD-RW plus 48X Atapi EIDE (optional)
Price exc VAT: £399; £499 with 15in monitor; £549 with 17in; £649 with 19in.

R7500 Networx HD
Memory: 8/16Mb, 60ns EDO
Hard drive: 2Gb (minimum)
CD ROM drive: CD-RW plus 48X Atapi EIDE (optional)
Speakers: 60W external speakers
Price exc VAT: £449; £549 with 15in monitor; £599 with 17in; £699 with 19in.

MicroDigital Ltd

Always the dark horse of the RISC OS market only the Mico is currently available. This, like the RiscStation systems, is based on the ARM7500 chip. The entire motherboard is designed in-house and features quite radical hardware — all in preparation for the Omega computer.

While not available at the time of writing the Omega bypasses the problem of the undeveloped OS with specialist hardware. When it arrives it should be very good.

The Mico uses MicroDigital's own IDE system to drive the hard disc which is fast, reliable and has good built-in facilities; it can support up to four devices. The Mico comes as one basic model as follows:

OS: RISC OS 4
Memory: 16Mb, EDO
Hard drive: 8.4Gb
CD ROM: 48X speed drive
Screen: Up to 16 million colours; 1600 x 600 x 256 colours maximum; more (and faster) with the optional Lightning card (gives 1600 x 1200 x 16 million colours)
Sound: 16-bit CD quality, SoundBlaster and SoundBlaster Pro compatible. Serial MIDI in and stereo digital output. External speakers.
Expansion: Proprietary three-slot MicroBus and two PC-standard ISA slots. Four USB ports. USB and ISA products require special drivers to work on RISC OS.
Price exc VAT: £POA



APDL

With its roots in PD and Shareware APDL has created a modern machine with fast drives, a CD ROM, RISC OS 4 and lots more at the price of the original BBC Micro.

OS: RISC OS 4
Memory: 8Mb, EDO
Hard drive: 4.3Gb (minimum, sometimes more)
CD ROM drive: 48X speed drive
Price inc VAT: £399

END

 Money Manager 2001

The next generation personal and business accounts package for RISC OS is about to arrive. In the meantime, whet your appeitite ...



CERTIFIED PLUG-IN APPLICATION

For a long time now PC users have had decent accounts and financial management packages. That's not to say that we haven't of course (there are some very good packages out there). Sadly very few of these are actively being developed and supported, and since the days when they were, standards have moved on. We now have a wealth of facilities which the modern on-line world offers the home / business PC user. On-line statements, electronic tax returns and data sharing have to be the main features of a good package. Add to that network compatibility and the wealth of features that a powerful accounts package should have to monitor your finances and you end up with a killer-application.



My accounts

Monitor your bank, credit card, savings and investment accounts.



Banking

Integrates with EBMS (our business management package) for the quick and easy banking of takings.



Accounts payable

Handles all your outgoing expenses, bills and purchases. Scheduled withdrawls make regular outgoing payments easy to manage & plan for.



Accounts receivable

Monitor income and chase up bad debt. Scheduled deposits allow easy planning and forecasting.



Draw graphs

Pick from a wealth of built in graphs or create your own, using the powerful graph creation tool.



Run reports

Built in reports include :

VAT return, Tax return,

Profit and loss, Balance sheet

or create your own reports using the built in report creation tool.



On-line services

Link directly to your bank's website. Download, import and reconcile statements straight from the 'Net.



Transfer data

Transfer data to and from PC, Mac, Linux and RISC OS accounts and business packages using the widely used QIF file format.

And so that's what we set out to do; To produce a personal and business financial management package for RISC OS that brought home to our users so much that we were missing before.

Take, for example, the importing and reconciliation of on-line statements and the importing and exporting of data to from other accounts packages supporting the QIF file format (eg. Sage, Money, Quicken).

Together with EBMS (our business management package) Money Manager 2001 goes a long way to providing the 'Total Business Management' package which RISC OS deserves.

Take proper control of your finances with Money Manager 2001 for EBMS. Coming soon ...

Image Software, 48 Hinchliffe Road, Poole, Dorset Tel : 01202 269720 Fax : 01202 685072 sales@imagesoft.co.uk

Specifications subject to change without notice. Release date and price TBC. All trade marks acknowledged.

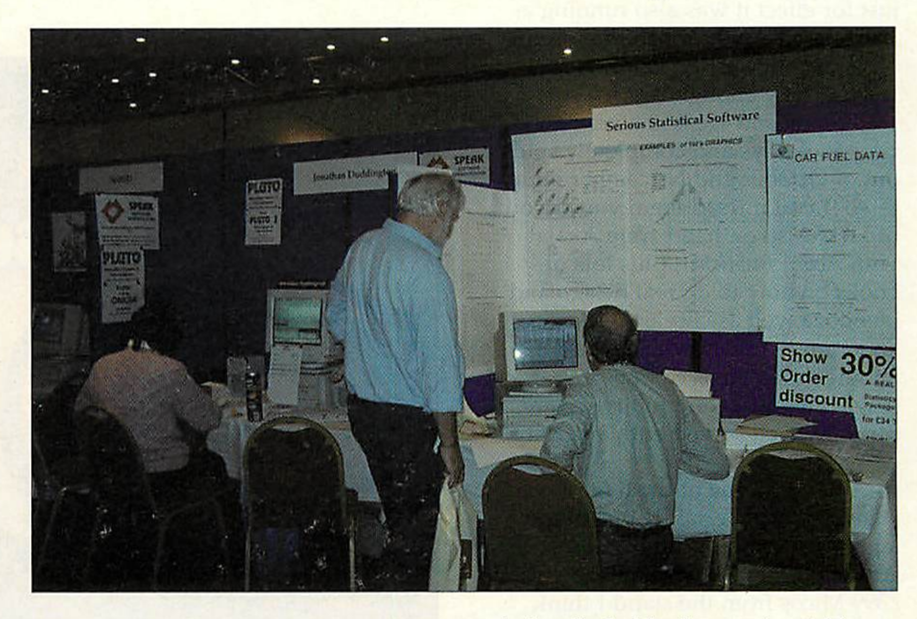
The show goes on...

Steve Turnbull reports on what's new and what's exciting

This year's RISC OS Show took place in a completely new venue, the Blue Mountain Centre, near Bracknell in Berkshire — certainly a better location than Epsom since it has rather less involvement with the M25 when coming from the North. And that is all you are going to hear about getting to the Show.

The venue itself continued the sporting theme of recent years and was very pleasant, being a golf centre at the end of a quiet road, though the less said about the bar prices the better. The three rooms that were used, two combined for the exhibition area and the other for the theatre, were nicely carpeted and even the PA system was of good quality.

The exhibition space was more compact than Epsom though with less window space — but then there's no need to stand inside and watch horses racing past. In fact I think the racing of horses across greens is frowned on in golfing circles. Probably the most notable omission from the exhibitor line-up was the last minute withdrawal of CTA/Riscstation. Unfortunately pressure of work and staffing difficulties prevented them from making it although R-Comp was taking Riscstation orders and the entire Riscstation-based games arcade was for sale with a free monitor with every machine. Now that's what I call turning things to your advantage. Microdigital were also absent though many people were hoping to see a new machine at this show.





The Internet Zone this time was sponsored by Precedence and Surftec who had a whole swarm of RISC OS NC machines giving access to the Web, this was using the same *NetManager* software created by Precedence for use in schools. And

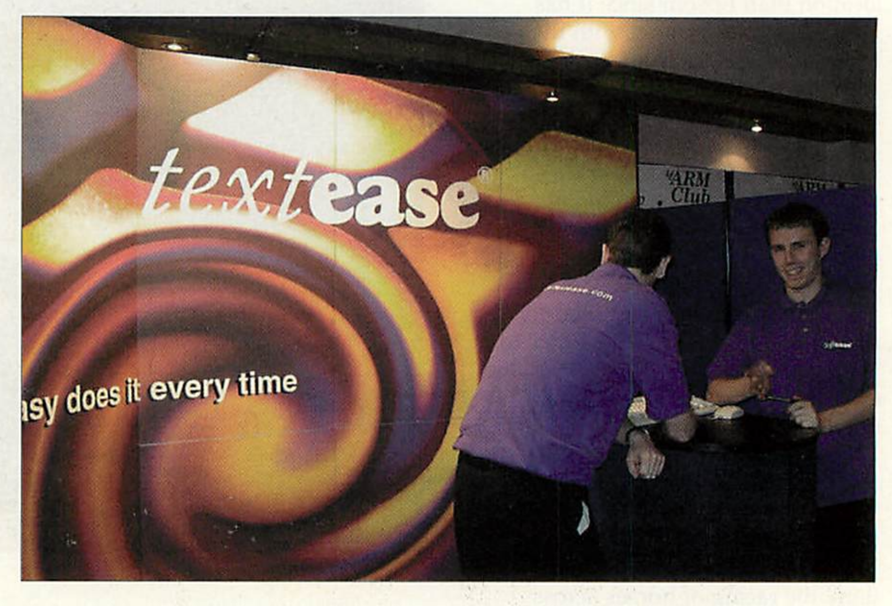


just for effect it was also running as a wireless LAN between the Internet Cafe and the Surftec stand.

Naturally enough *Acorn User* were there and we had a very good couple of days and completely sold out of October and November issues — so if you missed them you are out of luck. Also on hand were Akalat with *Acorn Publisher*, plus lots of books on how to do real design and layout as well as clip-art packages; and Paul Beverley with *Archive*, another good subscription-only magazine. As a community we are certainly well served with a variety of magazines.

APDL had one of the largest stands — and certainly one of the largest selection of products. Although they weren't selling their £399 Micos from the stand I think they had just about everything else (apart from the kitchen sink — and though the AAUG may have had a pizza oven even they didn't have a kitchen sink).

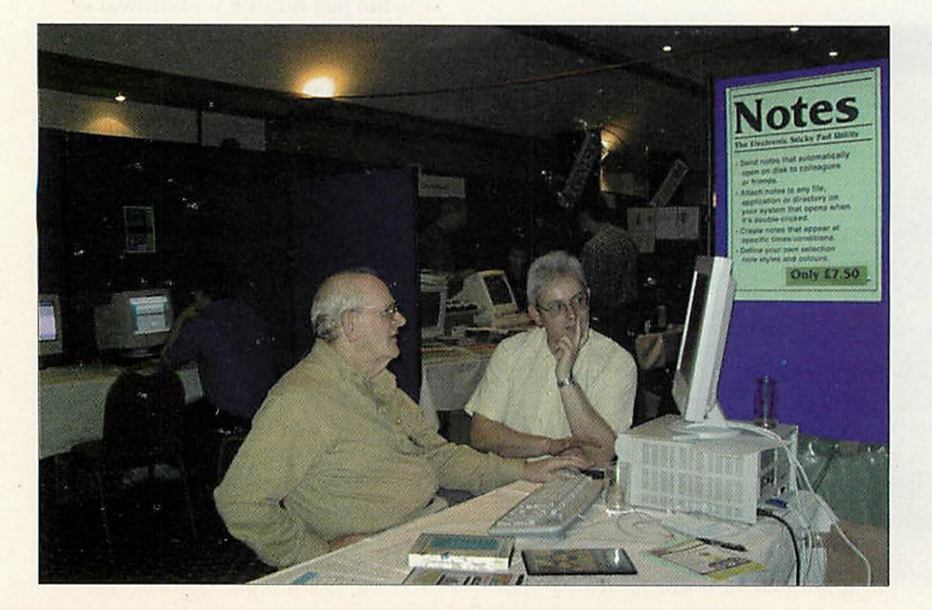
One thing that distinguishes most RISC OS software is that it is almost all of decent quality, it has to be because we are a very discerning bunch of users and always have been. This means that even older versions of software are usually quite usable even now and one thing that APDL do is buy up the rights to

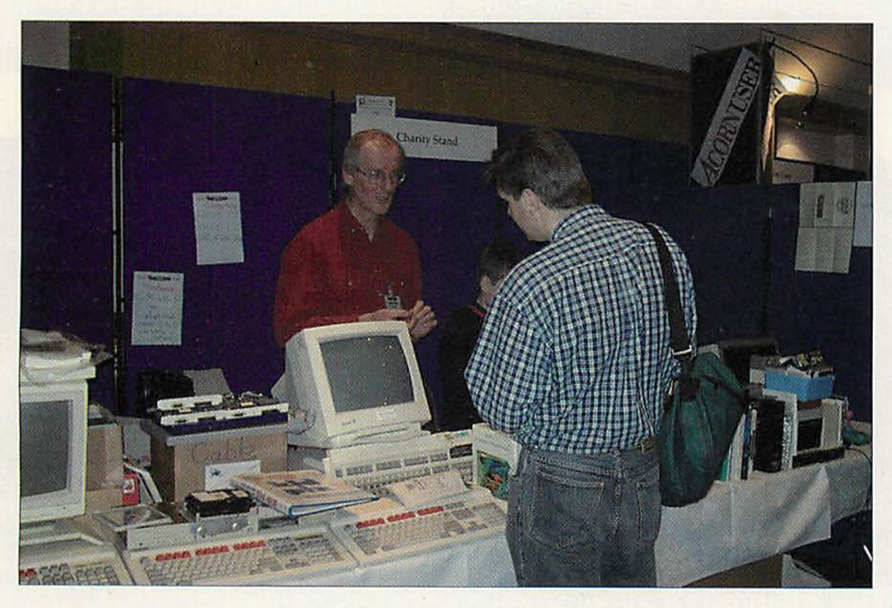


those older versions, or software that is no longer being developed, and re-sell them.

So from them you can get early, but completely serviceable, versions of *Ovation*, *Sleuth*, *Prophet* and *RiscCAD*. Not all of the software is old though, you can also get the latest version of *Ancestry*.

On one side of the *Acorn User* stand was the charity stand which was doing brisk business with all sorts of goodies from the RISC OS market and products from other systems as well. While just the other side was Softease, with the combined *TextEase* package which has th original DTP package, plus the spreadsheet, database and now presentation package; unfortunately the creator of the software, Geoff Titmuss, wasn't on hand to





demonstrate the system.

R-Comp is one of the most active RISC OS development companies and had a whole range of new and improved products for attendees to walk away with: There was version 5 of their *HTMLEdit Studio* which now contains facilities that make it easier for Web designers to use JavaScript and Cascading Style Sheets in their Web pages; plus it has also been extended to improve its handling of colours and fonts which gives better results across the variety of platforms.

Further changes include the ability of the system to check the HTML on the pages to ensure there are fewer mistakes and also checking on the image linking to ensure the pictures for the page are actually available.

One type of Web page that is often needed by Web designers is one that provides a set of thumbnail images of whole directory of pictures which are linked directly to those pictures if the thumbnail is clicked. R-Comp have provided a completely new application called *WebThumbs* which makes the creation of such pages entirely automatic but allow you to configure the result so that it suits what you. You can get it as part of either the *EasyClip 2+* or *Web Designer's Toolkit 2* packages (and, R-Comp wanted us to point out, upgrades for that also form part of the *HTMLEdit v5* upgrade bundle). Not content with all that there is also a new version of *WebsterXL* which now ships with Flash, MIDI and PDF plug-ins.

Also, on the more serious side, R-Comp have their network printing and Internet box solutions which allow the sharing of network resources from different platforms — so you can have RISC OS machines, PCs and Macs all sharing printers or the Internet through a networked box.

On the games front you can now spend valuable time on the multi-player version of *Descent 2* with machines linked across a network.

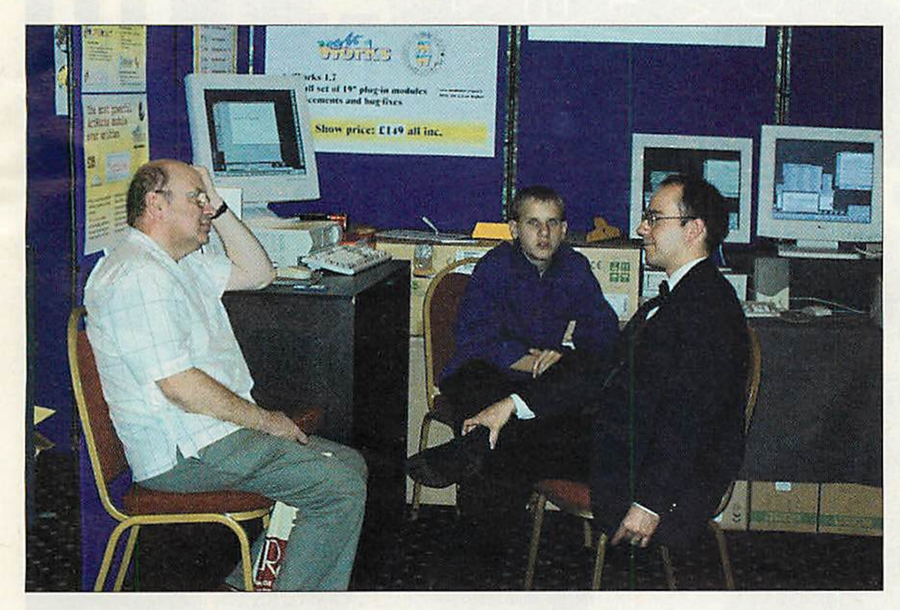
Surftec have also been a very busy company this year, it was back in February that we announced their *DigiFlash* software which allowed RISC OS computers to access CompactFlash cards used primarily in digital cameras but also in other machines. In fact the pictures for this article were taken with the brand-new Epson 2100Z camera which uses CompactFlash and then transferred through *DigiFlash* to RiscStation R7500 Lite on which the article was also written. Although companies like Epson, Casio, Kodak and Nikon use CompactFlash, other companies like Olympus and Fuji use the other standard SmartMedia. The basic code for SmartMedia was worked out for the *DigiFlash* software unfortunately there had been some problems. However those problems are now solved and *DigiFlash* for SmartMedia now works a treat.

As a side note, Surftec also had an IBM Microdrive which is a hard drive with a storage capacity of (only) 1Gb. The important point though is that it is the size of a CompactFlash card, about 3cm square and 3mm deep. With this plugged into a Casio QV-3500EX, using the highest resolution image, it was holding 400 photos with space for another 700 of them. Crazy.

At lower resolutions you can double the capacity at least and, bearig in mind that these cameras usually have a "video" function you could record several minutes of continuous images. Great for stop motion animation shorts.

Naturally enough Cerilica were on hand demonstrating *Vantage* and their other software. The latest

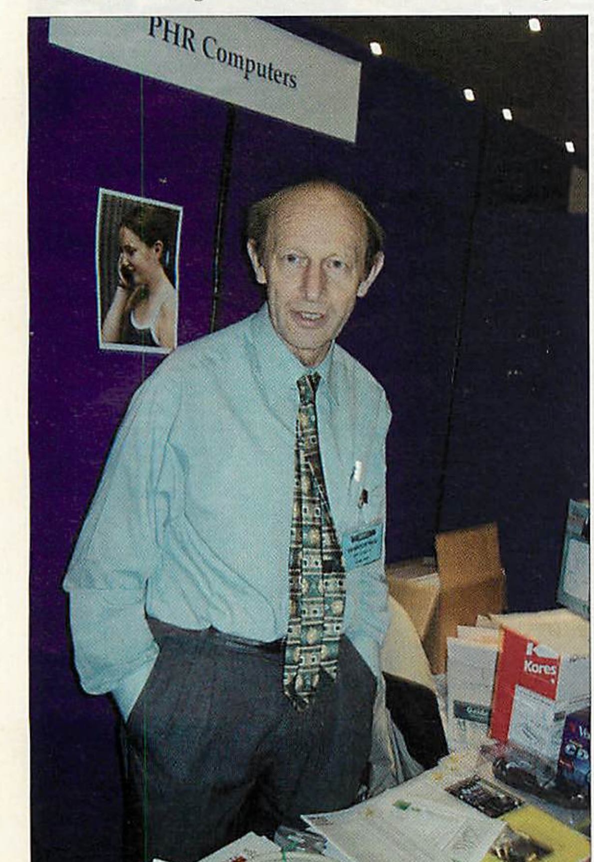




addition to the stable is *Insignia*. Specifically for the Web this package is designed to make creation of banner and title graphics easy for the inexperienced designer. You don't need to learn how to use a complex graphics package, all you do is type in the text you want to create and then add the effects.

Vantage itself has got upgrades that no one was expecting yet. There has been some bug-fixing but new additions include an upgrade to the colour rendering which allows the use of special inks like metallics, foils and finishes. This is the kind of "ink" that has to be added by special processes and is usually reserved for the most expensive of final printed products.

Another new product from Cerilica is *Batch EPS* which is an add-on for *ArtWorks* which allows multiple ArtWorks files to be converted to EPS — and then they can be imported into Vantage.



Photodesk the company was selling *Photodesk* the product, naturally, but in addition they have made somechange to their *PhotoLink* software so that it will connect directly with the SmartMedia reader from Surftec. This is important since Photodesk sell Olympus digital cameras and all Olympus cameras now use SmartMedia and USB.

On the subject of USB both Photodesk and ExpLAN have been working with Simtec on the new expansion card that will provide USB for RISC OS. Naturally Photodesk have been working on the camera side while ExpLAN have been hard at it implementing the standard printer interface for USB.

ExpLAN had a very busy stand. Not only were they hosting (once again best dressed man at show) Martin Wurthner with his amazing collection of *Artworks* plug-ins and *ArtWorks* itself, plus the new Solo computer, the range of LCD monitors and the unique *HolyBible* software. But, apart from all those, they were also demonstrating USB printing.

Paul Richardson of ExpLAN was keen to point out that although the USB printing is functioning correctly it is not yet ready for release because not all the worst case scenarios have been dealt with and besides the production versions of the hardware won't be available until after Christmas. But it will make a great late Christmas present.

Late on the day came a completely unexpected but dramatic announcement from RISCOS Ltd. The project for conversion of RISC OS to run on the netBook palmtop computer is to be re-started. Now the author of this article does know a little bit more about this (or at last he thinks he does) but with enough certainty to make any comment. Anyway this is excellent news and we can look forward to a StrongARM powered mini-machine in the not too distant future. In fact, the South West Show has been mentioned. Excellent.

This isn't an exhaustive list of everyone who was present but covers the ones that had exciting new products. Everyone who attended had a good show despite some misgivings about how busy it would actually be and concerns with some missing players. Special mention goes to Fleur Designs for not selling any computer hardware or software, or indeed computer service, but instead a whole set of RISC OS-created board games to keep you away from your keyboard.

All we can say is thanks to the ARM Club, SASAUG and ROUGOL for putting it together and we certainly look forward to the next one. Keep the flag flying.

END

Walk on the wild side

Steve Turnbull reports on an unexpected asset

When we did the magazine feature on digital imaging and brought in advertisers from that area little did we imagine that we would find a gem of a product ready for use on RISC OS.

NVM Digital advertise in video magazines promoting their copyright-free music which can be used in professional, semi-professional and amateur video work — it's not expensive and we take a look at that in the panel.

However it was something that was slipped in with their music sampler CD that attracted my attention, first as (well I admit it) something amusing, but then I realised something rather good.

You may remember the *Frontier 2000* CD-ROM from Cambridgeshire Software House, it combined the history of the Carlisle area with detective work looking for clues to locations in the border regions. In fact this product encouraged very successful family holidays near to Carlisle.

NVM Digital have their own answer to *Frontier 2000* and it is their Fell Walks on CD-ROM series. Although it has PCs and references to Internet Explorer and Netscape Navigator plastered all over it, the whole system works well on a RISC OS machine — with a couple of caveats.

I will cover the caveats first and then get on with the CD itself. First, you have to have CDROMFS from Warm Silence Software because the CD uses the Windows long filenames format, RISC OS 4+ may work as well but that has not been tested.

Second, and a little more irritating, is that neither *Fresco* nor *Oregano* can handle the spaces in some of the filenames which means that if you want to access some of the sub-directories you have to resort to opening up the CD directories and finding a suitable HTML file within the directory and proceeding from there.

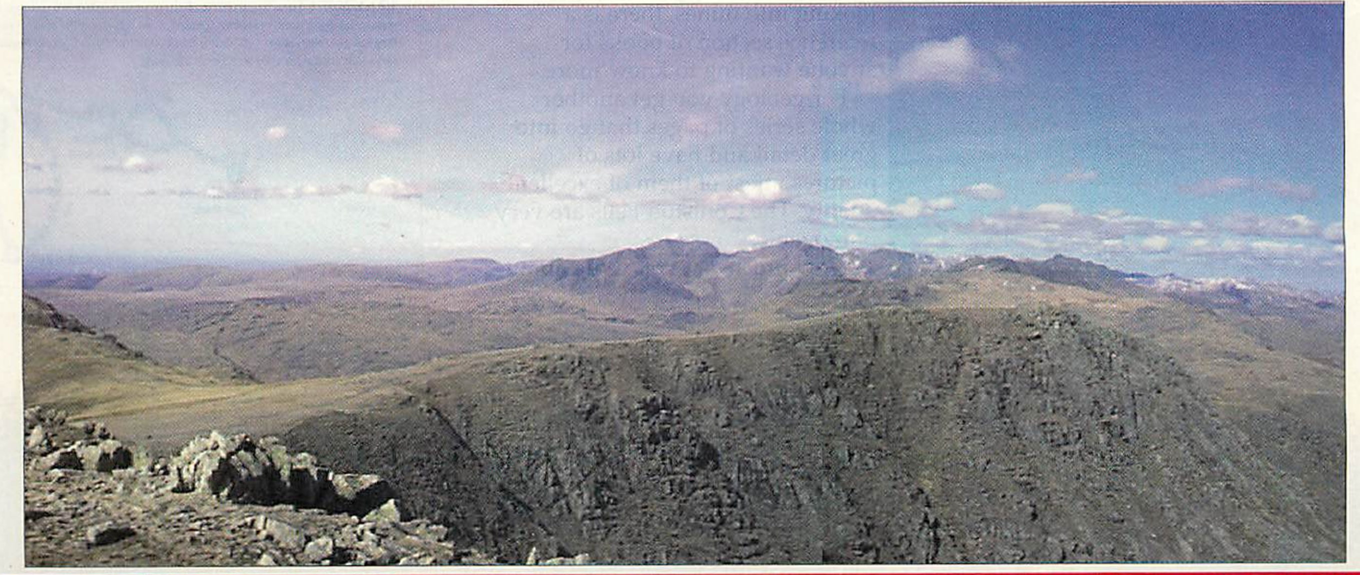
Oregano is slightly better here because at least it tells you what the complete filename is, whereas *Fresco* just says it can't open the file without actually saying which one is causing the problem.

That over with let's get on with the interesting bit: What's on the CD? In this case we had the Coniston Fells CD, some of the material (such as the safety section) will be repeated on the other CDs.

What you get

The contents of the CD is broken up into several specific areas, three main ones and six others. The first group is composed of History, Safety and the Walks themselves

The history section is only a single HTML page but gives an over view of the Coniston area from





5500BC up to about 1800 — as the page remarks almost sadly there have been very substantial local events in that period apart from the Ulverston Bread Riot (1800) and the Newfield Riot (1904).

The various sections include the Mesolithic and Neolithic periods, Iron Age, the Romans, the Dark Ages, Vikings, Normans (including the frequently changing Scotland/England border), Henry VIII, industrialisation and more North/South conflicts.

There are quite a few picture resources here although this is one of the smallest sections on the whole CD. From here you also get links to the geographic sections and Donald Campbell.

The Campbell section covers the life of Donald and his father Malcolm. Naturally the fatal crash of Bluebird in 1967 is covered since it occurred on Coniston Water, but this very up-to-date CD also contains information about the recovery of the Bluebird and possibly Donald Campbell's body this year.

For Geography you get sections on the geology of the area, the coppermines, slate, the Coniston railway and flowers you might meet while walking.

Not content with just explaining about the copper that was mined here for centuries the CD tells you how to get to the mines from Coniston village — while also cautioning you about correct behaviour in the area. Following these pages you can walk all over looking into mines, there is a reference section of books for anyone wanting to know more.

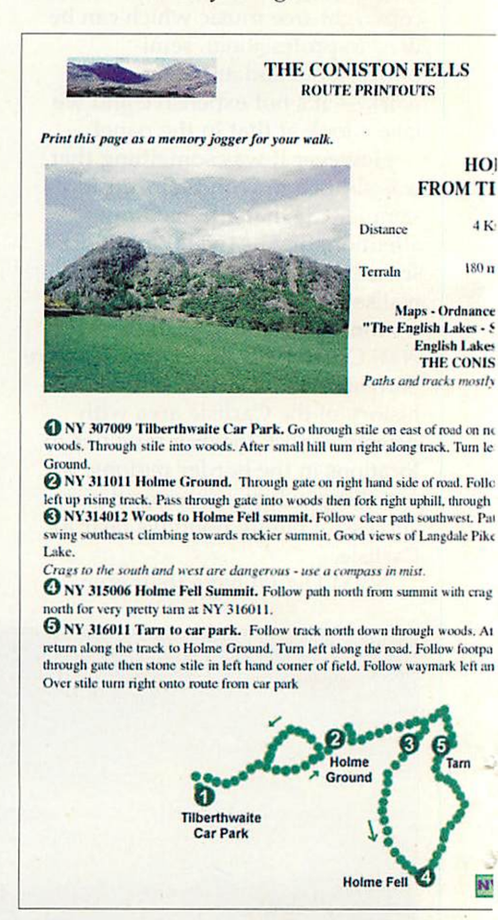
For geology you get another whole series of pages that go into great detail and have lots of pictures, most of them of excellent quality. The Coniston Fells are very photogenic.

How much can you write about slate? Well there are four pages on it here though much of it is on the history and the quarries around and about. You can explore the old mine buildings but once again the safety aspect is stressed.

I can't say I am big on flowers, and here we have 44 varieties covered in fair detail, including the stinging nettle — something you do tend to come across while walking unfortunately. Even this has some interesting facts associated with it, but you will have to get the CD-ROM to find out what.

Tourist trap

If you go walking in Coniston you are a tourist and there is a whole section on touristy things to see and





do. However having holidayed around here I have to say that really it is not your classic tourist area, not if you like theme parks, amusement arcades or the clubbing scene.

It is more your walk around outside and look at things, get on a boat and look at things or go into a building and look at things kind of place. The tourist information section reflects this with museums and boating opportunities. Not that I'm complaining, I like walking around and looking at things.

Nine towns and villages are described in a little detail if they have some particular feature of interest — more walking around and looking at things — they are Coniston, Ulverston, Seathwaite, Broughton in Furness, Hawkshead, Little Langdale, Ulpha and Torver. You are also advised to check out a publication called "The Place Names of Cumbria" if you are interested in the etymology of names like these.

In the Photo Gallery there is a huge number of additional images including such items as *Blocked Fox Hole* and *Burial Cairn on Torver Low Common*. In addition to these single shots there is a selection of panoramas with images stitched together such as the *Tarn Hows in snow* which I have reproduced on these pages.

Another section is the hyperindex which provides links to every nameable item on the entire CD providing multiple links where appropriate — for example Banniside Stone Circle can be found on one of the walks and as well as in the Photo Gallery. Useful if you know what you want but don't know where to look.

Finally, under the sections of "lesser" interest is the music. You will need the PD program SoundCon to play the 96Mb WAV file of mood music to go with the CD. You don't have to play it and it's not going to set your soul on fire, but it is 18 minutes long and pleasant enough.

If you play it while viewing the CD you may find that it gets a bit jittery with *Oregano* — it becomes a pointless exercise if you are using *Fresco* as it cuts out completely while this browser builds a page.

Walkabout

Before I get down to the walks themselves I will take a brief look at the section on safety. The safety instructions are amusing but firm, they explain quite clearly why it is a really bad idea to wander around the Fells without the proper clothing, footwear and equipment. While giving good advice on what you should be wearing. There is also a section on the Country Code which everyone should know — don't you?

There are 15 walks in all rated in terms of distance (on a scale of 1 to 3) and degree of climbing/quality of surface involved (rated A to C). The walks range from a couple of 1As to some 3Bs and 3Cs — real toughies. Plus some of the walks involve locations that you can fall off, places with the name "crag" usually have

LOCATION MAP CONTENTS PAGE
PRINTOUT INDEX

.ME FELL
.BERTHWAITE

(2.5 miles) 1

(50- ft) ascent A

Survey Outdoor Leisure 6
uth Western Area" and 7 "The
- South Western Area"
TON FELLS - Walk 1
clear. Dangerous crags on Holme Fell.

thern side of Tilberthwaite Gill to
along road to houses at Holme

track south and then turn back
rees to open fell terrain.
becomes indistinct. Gradually
, Coniston Fells, and Coniston

on right. In area of many paths head

the foot of the hill turn left and
on the right after houses. Go
then left over stile into woods.

MDIGITAL.COM



LOCAL WORDS AND PLACE NAMES IN THE CONISTON AREA

CONTENTS PAGE
BACK

There are many words which appear again and again in local place names. Many of these, such as "beck" and "dale" are in common spoken use as well. So here we list some of the most common, with examples of place names from the Coniston Fells area and its immediate surroundings.

"OE" - Old English, "ON" - Old Norse

Band - Elevated land dividing two lower areas (ON "bandr"), also meaning boundary - e.g. "Prison Band".

Barrow - A hill, ridge, or tumulus (OE "beorgh" small hill) e.g. "Wallowbarrow".

Beck - stream (ON "bekkr" stream) e.g. "Torver Beck".

Borran - ancient pile of stones, burial mound (OE "burrgaesn" burial place) e.g. "White Borran" on Blawith Common.

Burn - may mean "stream" as in "Greenburn" but may also be derived from "borran".

Crag - rocky cliff e.g. "Dow Crag"

Cairn - Pile of stones, often as waymark, sometimes very old.

Combe - from celtic "cwm" meaning hollow or depression in side of hill - e.g. "Black Combe".

Dale - valley (ON "dalr" large valley) e.g. "Dunnerdale".

Fell - a mountain (ON "fjell") e.g. "Brim Fell".

Garth - enclosure (ON "garor") e.g. "Hall Garth".

Gill or Ghyll - narrow ravine (ON "gil"), mountain stream - e.g. "Tilberthwaite Gill".

Ground - enclosure (recent) e.g. "Holme Ground".

Hause, Hawes, or Haws - pass summit - e.g. "Swirl Haws".

Holme - usually thought to mean "island" from Old Norse. However the considerable heights of Holme Fell and Appletree Holme make this explanation unlikely.

How, Howe - hill (ON "haugr" hill, mound), e.g. "Tarn Hows" (but "Swirl How" seems a bit too high?).

Intake - field, enclosure, reclaimed land (ON "intaka") - e.g. "Great Intake".

Knott, Knot - rocky outcrop on hill (ON "knutr" peak) e.g. "Hard Knott"

Man - summit cairn or summit - e.g. "Coniston Old Man".

Mere - lake (OE "mere") e.g. "Grasmere".

Park - enclosure (OE "pearocca") e.g. "Oxen Park".

Pike - prominent peak (OE "peac") e.g. "Stickle Pike".

Scar - rock or crag (ON "sker") e.g. "Walna Scar".

Scree - accumulation of loose stones on steep fellside.

Stickle - sharp peak or summit (OE "sticol") e.g. "Stickle Pike".

Tarn - small mountain lake (ON "tjorn") e.g. "Seathwaite Tarn".

Thwaite - clearing (ON "thveit") e.g. "Seathwaite".

Water - lake (OE "waeter") e.g. "Goat's Water".

With - a wood (ON "vithr") - e.g. "Blawith".

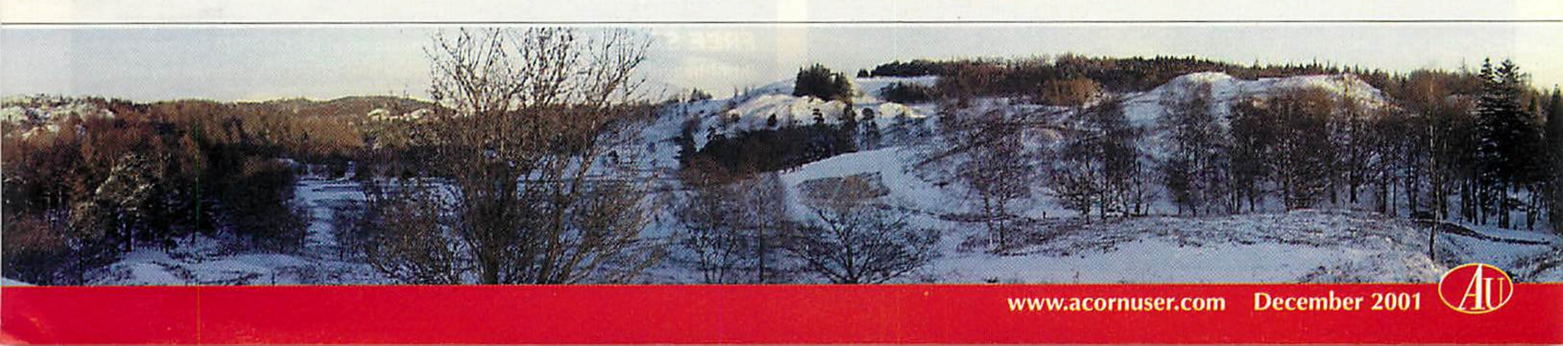
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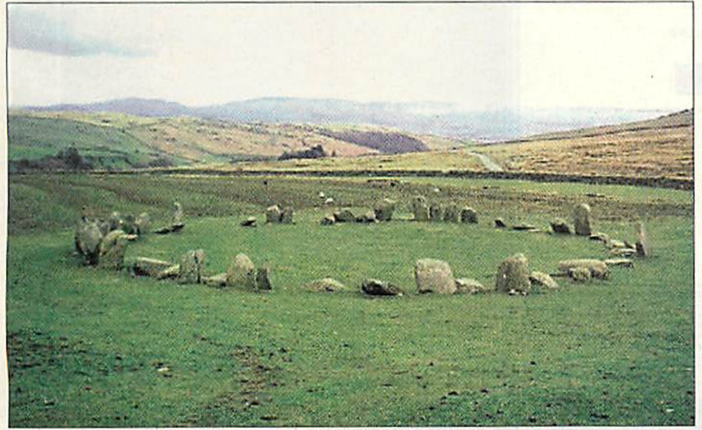
"The Place Names of Cumbria", Joan Lee, Cumbria Heritage Services, 1998
"A Field Guide to the Lake District", Jim Taylor Page, Dalesman Books, 1984
"The English Lake District", 14th Edition, M.J.B.Baddeley, Ward, Lock & Co. Ltd., 1926
"A History of Cumberland and Westmorland", William Rollinson, Second Edition, Phillimore & Co. Ltd., 1996



LOCAL WORDS AND PLACENAMES IN THE CONISTON AREA







sudden drops associated with them.

From the walks menu you select the one you want to look at — we will take the easiest one, Holme Fell from Tilberthwaite. This takes you to the introductory page which gives a short overview of the type of walk in terms of terrain. This walk is relatively easy but there are still some steep parts and places you can fall from. Who said walking was a safe pastime?

From this page you can go to the location map which shows you where the walk is in relation to Coniston, although there is only one map for all the walks and you will just have to find the appropriate place names yourself. Click on Start to go to the first page of the walk.

The description of every part of the walk is accompanied by photographs showing what you should be on the lookout for in terms of landmarks. All the walks are on public right of ways so you shouldn't run into any problems with irate landowners, though there is even advice about what to do if that does happen.

This particular walk takes you up to a summit from which you can view Coniston Water on a clear day — and if you can't see it what are you doing walking about the Fells on a day like this?

Rather taking an Acorn A4 computer with an external CD-ROM drive and a lot of car batteries to power it all, you can instead opt for a specially design printout page which gives you short clear instructions and the little map that you don't find on the location page. Print this out and take it with you.

And there it is. What a nice little CD-ROM. Definitely worth the price and with foot-and-mouth slowly dwindling into memory it's time to think about getting those hiking boots out and giving them a good rub down already for the spring. **END**

Product details

Product:	Fell Walks on CD-ROM: The Coniston Fells, The Ingleborough Triangle and The Langdale Valley
Price:	£14.95 each (inc UK postage)
Supplier:	NVM Digital, PO Box 1, Bentham, Lancaster, LA2 7GA
Tel/Fax:	(+44/0) 15242 62445
E-mail:	sales@nvmdigital.com
Web:	www.nvmdigital.com

New music

These were the original reason that NVM Digital advertised in *Acorn User* — after all, if you've created your perfect video epic you will need to add some mood music to complement the on-screen action.

Rather than have to pay messily for music that is copyright, or perhaps not pay for it which may result in even messier legal action there are plenty of companies that offer copyright-free music. Once you have paid for it you can use it as much as you want and the composer won't demand another penny from you.

This is a good thing in principle but it has to be said that 99 percent of copyright-free music is absolute dross. It is awful. Horrible. Usually put together by some untalented hack on a pathetic electric organ with a few sound effects and unimaginative drum patterns. Pass the bucket.

Got the idea? Good.

NVM Digital sent me their 20 minutes sampler CD — audio CD that is — which contains extracts from most of their music CDs.

The NVM collections are divided into three main groups Producer, Professional and Background. All of the CDs have over an hour of music but not necessarily continuous, this is serious stuff.

Unlike most of the dross, NVM have real musicians playing and they have talent. They can play different styles convincingly and with reasonable complexity.

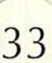
The type of music you get depends on the CD, plus the lengths of the individual tracks vary too. You can have very long pieces from the Long Takes CDs or short ones off the Jingles, Fanfares and Moods.

It all depends on what you are trying to create: is it a commercial or a drama? Are you doing Casualty or Time Cop? Romance or horror?

If you're looking for music to listen to, this isn't it. The music on these CDs is specifically for playing with visual images and not to distract from them. So there isn't a strong individuality in each track just a quality intended to enhance.

The prices range from £14.95 up to £24.95 so they are not going to break the bank. For tertiary education establishments with courses involving video production getting an entire set isn't going to eat into the budget and it will get you a good selection of worthwhile music to use.

Of all the copyright-free music I have heard this is definitely the best — and they've won awards too.



Inspect a gadget

Neil Farnham-Smith gets down and dirty with Epson products

Thinking about Christmas yet? Well if not I hope to provide a selection of new exciting products available in the computer world, and hopefully find a good few that will also work with RISC OS systems.

When the Editor phoned and suggested the idea, I thought, yes, not a problem but then finding something just launched, that qualifies to be a gadget and work with RISC OS is a tall order.

So where do I start?

Well a good place was Epson, seeing I had a meeting arranged to organise a promotion on their laser printer range I had an ideal opportunity to talk to them about their latest toys to be released in time for Christmas.

Epson are an old friend of the Acorn market, with their long line of reliable trusty noisy dot matrix printers that still keep running and running even today to their range of GT and Perfection parallel and SCSI scanners that in my experience have always proved reliable.

Their staff all seem to know a lot about Acorn, which is nice — and even have tried to suggest names of people within the Acorn market that could help (yes, they knew the names of some well know key RISC OS developers) which was refreshing.

What's new?

Epson have brought out their new line of 'C' printers, equivalent to the Stylus Colour range that we're all used to. At the end of the product number they affix either an UX standing for USB and SX standing for parallel.

The entire new range incorporates Epson's new MicroPiezo™ printer head, which is designed to last the life of the printer.

Epson printers have had a built-in printer head for some time, it means the genuine Epson replacement ink is generally cheaper than the competition as you are just buying a pot of ink and not a disposable head each time.

The new printer head also gives greater control over printing, such as being able to adjust the size of ink droplets using their Variable Sized Droplet Technology, right down to droplets or dots on the printed page so small its hard to see them using Epson's Micro Dot™ technology.

When all is said and done, the old Stylus Colour 460 was impressive, just slow — these new printers are even more fantastic, the colours are vibrant, the print looks fresh and clean. It is essential however to use the correct paper to achieve good results.

Finding printers that work with RISC OS, especially inkjets, is getting difficult, particularly as recent home user printers on the market are controlled using Windows software, with software-controlled power, ink replacement and so on. Without even a power button there really isn't anything you can do with an Acorn as you can't even switch the thing on.

Secondly USB is cheap, manufacturers can build devices simple to use and configure that just plug into USB, since there is no USB for RISC OS as yet (although very very nearly) again that stops things before we even get started.

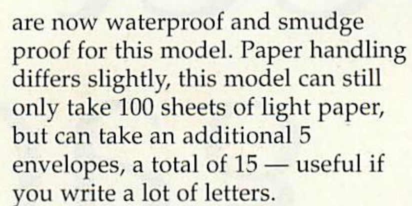
Epson have moved back from this model: having a parallel model of all the printers is the first good thing, secondly the power button is back.

At the time of writing these printers have only just been launched, and so getting my hands on these to try the current drivers with them hasn't been possible yet, but I hope to come back with some positive news in the near future.

We'll start with the C20SX, a basic printer suited to the first time computer owner or indeed someone who doesn't do very much printing. This new model boasts of 720 x 720dpi with print speeds up to 6.5ppm black and 3ppm colour. The sheet feeder can handle 100 sheets of 60g/m2 A4 paper down to 10 average envelopes.

The printer uses the common black cartridge with a three-colour cartridge system as with previous Epson Stylus printers.

The C40SX differs from the C20SX in the following ways, it



boasts of 1440dpi x 720dpi print quality running at up to 8ppm black and 3.9ppm colour.

Entry level professional use is aimed at the C60, this model comes with both parallel and USB interfaces and incorporates Epson's QuickDry™ Inks to help reduce the inks mixing while on the paper that would normally cause a fuzzy dot-gain effect.

The feature that caught my eye for this printer is Epson's Intellidge™ ink cartridges, previously with Epson printers, once an ink cartridge is removed, it shouldn't be put back in again, however these new ink cartridges not only feature a valve that closes again but the printer will also remember that cartridge's ink level for when it is returned to the printer.

The idea is if you are running low and need to print an ink intensive document you can pop a new full cartridge in and then swap back to finish off the nearly empty cartridge on less important jobs.

As with the C20SX and C40SX this printer additionally features an amazing 2880dpi and 12ppm black and colour print speeds. Its paper handling is the same as the C20SX and C40SX models.

The C70 builds on its lower siblings in the range and provides a blistering 16ppm black and 9.5ppm colour — a lot of laser printers would find it hard to keep up with this mean printing beast. The inks have been improved, they are now waterproof and smudge proof for this model. Paper handling differs slightly, this model can still only take 100 sheets of light paper, but can take an additional 5 envelopes, a total of 15 — useful if you write a lot of letters.

Finally, one nice touch with this model is that each of the ink colours can be replaced separately, so no waste.

And finally the C80, 20ppm black and 10.5ppm colour. This model is aimed at high volume users or light network use. The paper handling can take 150 sheets of 64gr/m2 paper. All of the Epson printers come with a 1yr warranty.

I am a camera

Also from Epson this month is a new affordable but hi-spec digital camera suitable for connection to an Acorn RISC OS system using Surftec's DigiFlash CompactFlash card reader (well, you can't blame me).

Epson's latest digital cameras use CompactFlash media and can utilise the IBM MicroDrive for major storage — if you can afford one.

Their newest addition to the range is the Epson PhotoPC 2100Z camera, aimed at light home use and is styled like a normal run-of-the-mill camera which is less intimidating for those among us who can't use computers or who find the video remote control as scary as a hairy spider.

The 2100Z features a 2.3 MegaPixel CCD, and with some software wizardry it can produce 3.1 MegaPixel output using Epson's HyPict™ technology (Epson like their ™s, don't they?).

Equally this camera gives a 2x optical zoom, and 2.5x digital zoom.

Epson's experience of getting good quality print out of a computer means they understand what is needed in the computer in the first place, to meet this requirement they have developed a standard called Print Image Matching or PIM for short.

PIM is available on a vast array of new digital cameras, from manufacturers such as SONY, Ricoh, Minolta, Kyocera, Nikon, Casio, Panasonic, Olympus, Pentax, Konica and Sanyo.

The technology links the camera to the printer by recording information about the colour space, colour adjustment and camera mode in the header of the image file at the time when the photo was taken, this information is then used to adjust the printer settings to provide optimal printer output.

The Epson Stylus Photo 895 is able to have a CompactFlash, SmartMedia or MemoryStick plugged directly into the printer's PCMCIA slot, the printer then prints directly from the media without needing a computer. However the 895 is a USB-only printer, thus is presently useless if you want to use it with an Acorn.

The other Epson printers reviewed can all make use of PIM, however this is only available via Epson's own Windows printer drivers and not via RISC OS ones.

Digressing back, the 2100Z digital camera comes as standard with an 8MB CompactFlash card suitable for storing 117 e-mail quality images (720 x 480 pixels), 16 print quality images (1800 x 1200 pixels) and 11 HyPict™ images (2160 x 1440 pixels).

CompactFlash media prices have fallen along with PC SDRAM prices, getting an additional 64MB CompactFlash won't break the bank and is certainly a worthwhile investment alongside a new digital camera.

The 2100Z has its own built-in 1.6in colour LCD screen, used to control the camera's settings and view stored pictures.

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The 2100Z from Epson is a great camera for someone who needs something that mimics a typical 35mm home snapper but has a huge host of features to keep most keen computer users happy for a long time.

END

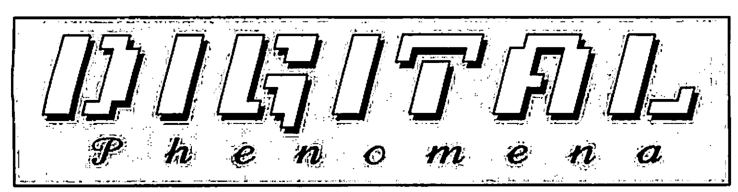
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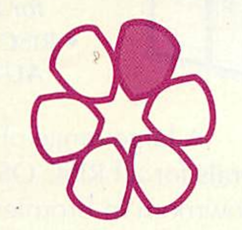
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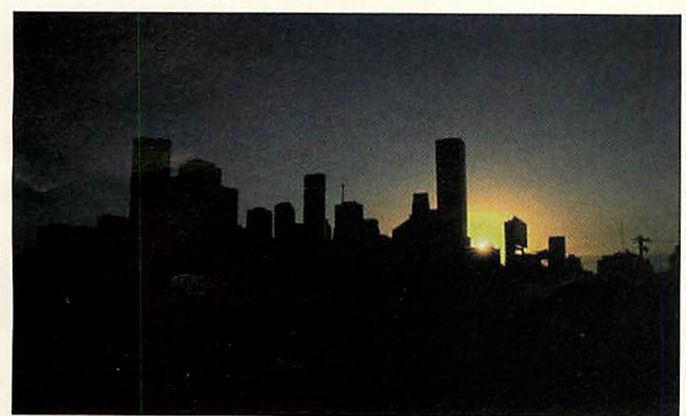
Darren Windsor of Image Software explains what it's all about

For those of you who read the article back in May you may well remember my rambles on how the software behind the POSum got started. For those of you who aren't regular readers, or who (like myself) are lacking in the memory department, I shall briefly recap....

It was a dreary February evening back in 98. I was working part-time at the local video store, as I had been for the past two years, not quite sure what path my life would lead. There we had, and still to this day have, a Digital MicroVAX computer system rigged up to two VT420 terminals.

On it ran a bespoke retail management package which handled point of sale, stock control and customer accounting specifically for the market which the business was in — rental movies and computer games. Being a large video chain all of their stores had the same system which could be dialled into by computers at Head Office to download sales data, accounts information, and so on.

This is when inspiration struck.



Would it not be possible to go one better? To write an up-to-date package, on a modern OS that catered not just for the video store but for retail businesses in general. A business management package ... no ... a *total* business management package.

So, I was going to write a package, but it came to crunch time — the choice of OS. I would be starting university in the autumn and no doubt there we would be using Windows and Linux machines, programming in C++. Should I ditch my favourite OS that I'd been with for so many joyous years in favour of a 'PC' based system?

So I weighed up the pros and cons: I could program for RISC OS, it would save time in learning new languages, how to program for other GUIs and I had faith in RISC OS (and still do).

Windows had always given me nothing but gip and Linux was just not a "beginners" OS. Also, I had to bear in mind the needs of my potential users. They would need a reliable system that required little or no maintenance. Something that would possibly need to last them for many years. And so the choice was made to go with RISC OS.

The following day I sat down at my Risc PC and began the first few lines of code. Almost four years later, development is still going strong, and the benefits of choosing RISC OS over other operating systems is becoming apparent as we begin to market the product in the real world. People are very wary of Windows when it comes to retail environments, to the point where they specifically request non-Windows systems. Which is exactly what we have!

The software

So what about the software itself? What's the difference between POSum and EBMS? Well, it's about time to dispel some myths, set the record straight and clear things up. EBMS is the software at the heart of the POSum, the software which has taken all this time to develop (and which is still in development).

POSum is the name given to the machines that we supply with EBMS pre-installed. They are computers produced by Simtec (our hardware partners) equipped with ARM7500 motherboards and additional serial ports and power jacks to support extra peripheral devices such as printers, barcode readers, display poles, cash drawers, weighing scales, and so on.

POSum systems are not just for the shopkeeper — this is a common

misunderstanding. POSum systems are a complete solution for the business user. They support additional peripherals should they be required, but in many cases they are used "as-is" for systems that aren't used in a retail shop-front environment. They are shipped with EBMS, the software, pre-installed. All you have to do with a POSum system is to plug it in and switch it on. Simple for the beginner.

So what of EBMS — the Electronic Business Management System. Well, the software can be run on any RISC 3.5+ machine equipped with a harddisc, and at least 16MB of RAM. It provides point-of-sale, customer accounting, stock control and job monitoring facilities in an integrated software package. Any business which deals in the supply of goods and/or services can use EBMS.
So what does the software offer in the way of these facilities?

Point of sale

The point-of-sale is through an easy to use (EPOS) terminal window that is clear to use and well laid out for even the most illiterate computer user. Getting to grips with the terminal window (and training staff to use it) takes minutes rather than hours. Wakefield 2001 saw a POSum loan unit being given to Surftec for the weekend. It took only a few minutes to set-up the system and train the staff in its basic use.

Selling goods to a customer can be done by barcode (either manually entered or scanned by an attached reader) or by a PLU (product look-up) code. Easy searching of products, interactively, by name, code or supplier reference makes it easy to sell a product which you don't have to hand or to access a product's details on the system (for a price or quantity check).

Visits are tendered using the payment type which the customer is using, and the system keeps track of the amounts tendered by these different types (a 'balance' of the takings broken into each payment media is quickly accessible).

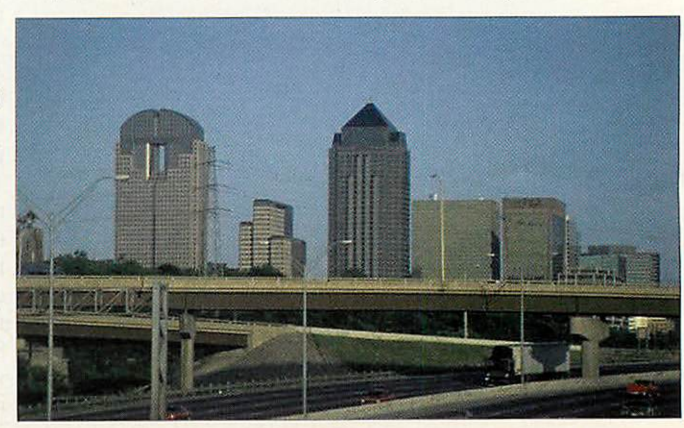
Handling the return of good (unwanted) and faulty stock, by customers, can be quickly and easily processed through the 'return' and 'faulty' credit operations, which automatically credit the customer for the amount of the item and adjust the product's inventory level to reflect the return. Refunds are as easily processed as tendered payments.

Overringing an item which comes up at the wrong price is also possible using the 'Overring' credit type. This allows a product sale price to be manually changed quickly.

Quick product querying allows a product's details in the product database to be accessed by directly scanning the product or entering its PLU code.

Integrating with the customer database the EPOS terminal provides a means to sell products / services to a specific customer, the printing and tracking of invoices and easy access to a customer's account history. Using an account, sales can be processed for future payment; no need to tender payment at the point of sale — a necessity for those businesses who do 30-day invoicing and/or handle Official Orders.

Support for 'pricing structures' allows different prices to be set for a product for different 'types' of customers (for example, trade accounts).
Another discounting system allows a set discount rate for a specific customer type (perhaps trade customers get 30 per cent discount across the board). Additionally we have the ActivPromo promotional discounting system which provides the automatic redemption of offers such as "buy 3 for 2" or "buy 3 for 99p". Quite a handy facility to have.



New customer accounts can be setup directly from the EPOS terminal through direct access to the 'new account' facility of the customer database. Using *AddressIt* from R-Comp adding a customer to the system is easy — enter the name, postcode and house number and the system will automatically fill in the blanks.

Ordering products for a customer, which you don't currently have in stock, can be handled by the system through the presale system. This automatically appends a product requested by a customer to the next Purchase Order to the appropriate supplier. Deposits are fully supported — a customer can pay upfront, just pay a deposit, or pay nothing upfront, depending on how you want to operate.

When the product arrives in the next delivery the system will remind you that the delivery contains products which you have specifically ordered in for a customer so as you don't accidentally go and sell it to someone else.

Exports to non-EU countries are handled at the press of a button, crediting off the VAT.

Receipts and invoices for a visit can be quickly (even automatically) generated and printed on an attached printer. Proper VAT

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invoices and receipts are produced in the case of VAT registered businesses. If the business isn't VAT registered a simplified invoice is produced. Reference numbers are printed as barcodes (which seems to impress a lot of customers) and a section at the bottom of the invoice allows you to add your own notes to an invoice (or by default to all invoices) such as your terms of sale.

Customer accounting

In the way of customer accounting, charging services to an account can be done directly through the customer database without the need to use the EPOS terminal at all. Clicking on the 'charge' button opens up the charge window. Entering a description for the charge and it's associated amount is all that is required.

Both VAT inclusive and VAT exclusive prices can be used (a quick key press adds on the VAT through a keyboard short cut, in the case of VAT exclusive prices).

Printing an invoice is also simple. Clicking on the 'invoices' button, selecting 'new invoice', entering an invoice number to use (if the system generated invoice number isn't wanted) along with a payment due date (again, if the system generated date isn't appropriate for this invoice) and all uninvoiced transactions are automatically printed out on a new invoice.

The same applies to credit notes. Adding on a credit to an account is much the same as for a charge in the same way as generating a credit note is similar to an invoice.

Account cards can also be printed from here to allow quick and easy access to customer accounts through the EPOS terminal window. Lost cards can be quickly voided as soon as they are reported to be missing so as they can't be used by someone else.

For the storage of customer/client related information the accounts database holds an internal directory for each customer account on the system. Clicking the 'view files' button in the database window, with an account on screen, opens the directory associated with the account. New documents can be saved here so as they can be quickly accessed. An ideal way to group together all correspondence and so on, relating to a specific customer.

Some of the recently added fields to the customer/client database provide for a separate goods delivery address (to the invoice address) and e-mail details (complete with a button that fires up your e-mail editor with the customer's e-mail address automatically placed in the 'To:' field).

Job control

For those businesses that do work for clients (such as computer repairs) EBMS provides a job control system. Work jobs can be submitted to the system, as they come in and monitored right through to completion, at which point they can be automatically charged to the appropriate account and closed-off.

Jobs are assigned to different 'states' as they progress. These states are defined by the user and will vary from business to business. The first state that a job can have may be "quote customer for job", another might be "inform client job completed".

A newly submitted job is given a description (such as "Replace 20GB IDE harddisc in Risc PC"), an estimated cost, an initial job state and names of employees working on the job. Once submitted this job remains on the system until it is deleted or closed-off.

A 'view open jobs' facility provided by the accounts system allows you to view each job which the business has underway, split into each job state. A job can be edited with a quick double-click of the job's entry in the report window. This allows details of a job to be changed at any time (such as its state or estimated cost). It is also easy to jump to the account of a customer corresponding to a job from the report window.

Closing off a job removes it from the list of active jobs and adds a charge (under the description given for the job) to the corresponding customer's account. As with other charges the user can quickly and easily edit this in the account history before printing an invoice.

Reportage

A wealth of reports is provided with the



basic package, along with a facility for 'plug-in' reports, extra ones of which will eventually be made available for download off of the Internet from a central 'report archive'. Reports currently provided with the package include:

Product status reports display a list of products (broken down into product types) which you stock, along with the current retail price and stock level.

Transaction detail which is a list of all transactions processed through the EPOS terminal on a given day. As a security feature this allows the business manager / owner to check for possible instances of abuse or theft by the staff.

Product presales is a report of products ordered by customers through the presale facility of the EPOS terminal, which still needs to be collected.

Other reports are originated through the plug-in facility of EBMS: The SalesLog which gives a report of goods sold for a given period, including quantities and prices. Stock value shows the cost price of goods held by the business (useful for insurance purposes).

VAT accrual is an accounting report giving you all the information related to VAT returns where an accruals based accounting method is used by the business. VAT cash is the same as above, but for businesses who account on a cash-basis.

Visit statistics shows, for a given period, on average customer spending, number of customer visits. Cost Of Goods Sold (COGS) gives amount of VAT payable, profit figures, and so on. A very powerful tool in its own right.

And all these reports (except for the stock value report) can be run for a given shift, day, week, month, accounting period, year, or any given range of days.

The idea here is that the user should be able to obtain any information which they are likely to find useful from the system, whether it be for the day-to-day running of the business or for yearly tax or VAT returns and accounting purposes.

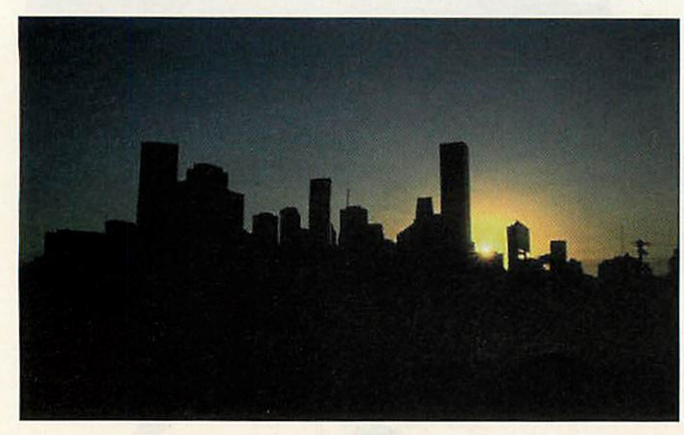
The report viewer provides a clear and convenient way of viewing or printing a report and the report archive makes and keeps copies of reports as they are generated. These can be reviewed later on in the future, without having to re-generate the report.

In stock

Stock control facilities provide easy and auditable processes for the handling of goods. A comprehensive product database supports rental, second-hand and (new) retail stock — with separate inventory levels and prices for each of these 'stock types'. Up to four suppliers for each product are supported, where different pack sizes and cost prices can be assigned to each supplier.

Each product is assigned to a 'product type' which enables similar products to be grouped together and assigned with a VAT code (for example, "Groceries (c)" where 'c' is zero rated.).

The receiving of stock onto the system (when a delivery is received, or a visit to the local cash and carry has been made) is done through the 'receive from supplier' facility. This displays a form on the screen on which the user enters each product received in the delivery — including the quantity and total cost price.



Products can be entered by searching though a menu of products (broken into product types and sorted alphabetically) or by barcode / PLU code (either scanned or entered manually). Once completed a delivery receipt can be printed for attaching to the delivery note (for later reconciliation). The receive can then be submitted, whereby the system will update the stock levels in the product database to reflect the newly received stock.

In the case of Purchase Orders already on the system a receive form will be automatically created by the system, to speed up the receive process even more. Selecting the appropriate order from the form's menu will load up all the products on the order, ready for receiving onto the system.

Correcting a mistake made when receiving in stock is simple. An 'edit receive from supplier' facility allows a form submitted through the 'receive from supplier' facility to be corrected and re-submitted. The simplicity here is that the form is edited to reflect what it should have read in the first place; the system calculates the difference in quantities and makes the necessary adjustments. A 'corrected receive form' can be quickly printed to reflect the changes made.

As for transferring stock off of the system, the transfer facilities provide for stock to be returned to a supplier or transferred to 'known loss' (when stock is known to be lost or damaged and can no longer be sold). As with the receive facility, the transfer facility uses a similar stock form system for the input of goods to be transferred off of the system (to provide a consistent stock control interface for the user).

The user enters each product being transferred off of the system onto the form, along with the quantity being transferred and the amount to be credited. The form can be printed out for future reference or filing, and in the case

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of a product return to a supplier, a proper returns note (complete with the supplier's Returns Authorisation (RMA) number) is printed for enclosure with the goods.

A facility for performing stock takes is also provided. This allows either the entire inventory of the business, or selected products or product types, to be audited when required. This involves physically scanning (or entering) the quantity of each product.

A discrepancy report shows any variance between the physically counted stock and the computed quantity. Finishing the stock take adjusts the stock levels on the system to those physically counted — accounting for any lost items. As with the receive and transfer facilities, an edit facility is provided where the user can adjust the results of a stock take if mistakes were made. Again, the same standard 'stock form' system is used.

Extra modules

So far we've looked at the features supplied as standard with the basic package. However, not everyone's business is the same. Some people have newsagents or video stores, others build equipment and need to track components, others still want to offer on-line catalogues and ordering facilities.

This is where the EBMS plug-in modules come in (the EXM's; EBMS eXtension Modules). These add to the functionality of the software for the specific needs of the user. This allows everyone to share the same 'basic' package and add to it the modules they need.

So far we have three of these EXMs:

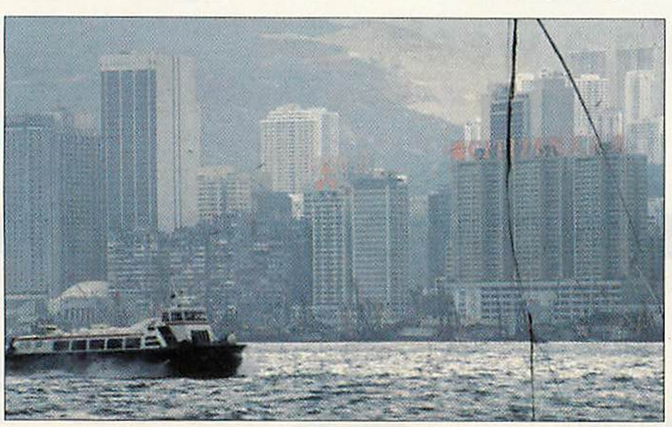
The Newsagent module provides everything the newsagent needs in addition to the standard functionality of EBMS, such as the printing of newspaper delivery rounds and bills.

Component Integration and Tracking (C.I.T.) is for businesses that deal with products which they build from components, of which they want to track individual serial / batch numbers. This module extends the job control system to handle 'build jobs'.

From the product database a new build of a product can be requested, either for general stock, or a specific customer. This is sent to a workshop terminal which instructs the assembler on how to build the required product (using pre-configured build instructions for the product).

Any information which you wish to hold on the build can be prompted for entry from the assembler (for example serial numbers of components). Once the build is completed the stock level of the item is increased and the stock levels of its components is decremented accordingly to reflect the resulting inventory.

This opens up a whole new market for EBMS: every business that manufactures and repairs PCs. Similar packages on other platforms which provide this functionality are almost non existent. The few packages that do exist cost many thousands of pounds.



The Rental support module is for businesses that hire out products (such as equipment or videos / games). The rental facilities seamlessly integrate with the existing system to provide the processing of rental transactions in the EPOS terminal, the control of rental stock (using the same receive, transfer and stock take facilities) and the generating of rental reports (such as overdue reports and hired-out product lists).

EPOS peripheral support covers those businesses with a customer front-end (those in a retail environment). The modules provides transparent support for a wealth of RS232-driven POS peripheral devices including barcode scanners, customer display poles, receipt printers, weighing scales and cash drawers.

Another few modules are planned for release in the very near future:

Buy-by-wire (e-COMmerce module) provides a built-in HTTP/1.1 Web server. With a permanent connection to the Internet (which gets cheaper as time goes by) allows customers to browse through the product database and place orders for products.

These are logged by the system so as they can be printed out and processed as they are received. Customer's can also log in to their accounts and see if they owe money, if so how much, and for what, by being able to view their account histories.

Money Manager 2001, which will also be distributed as a stand-alone product, integrates with EBMS to provide a financial accounts package module for the system. This will provide processing and recording of received and paid monies with support for scheduled withdrawals and deposits. A powerful reporting system allows the user to produce customised reports and graphs. Those supplied with the module will provide information for direct entry into self-assessment and VAT returns forms.

QIF import and export facilities

will provide integration and the passing of data to/from PC-based packages supporting the QIF format (such as Sage, Money, and so on). Banking facilities will allow takings through EBMS to be automatically recorded on days that banking is done. From a glance the business owner will be able to see the state of their finances.

More modules are planned, including a Pub and Club Manager for pubs, bars and night clubs, but these are still in the requirements gathering stage, so I can't say much about those at the moment.

What is important though is that development is continuing, and at quite a pace. Each week usually sees an updated version of the software; not just bug fixes but additional functionality — something which impresses people who have moved over from PC-based systems.

Of course, another advantage to RISC OS applications is that they tend to be small — and so upgrades can be supplied by e-mail or floppy disc rather than needing several CD's. The latest version of the software boasts an auto-upgrade facility which enables existing users with an Internet connection to automatically download upgrades off the Internet from our upgrade server.

These are automatically downloaded and installed by the system — all the user has to do is click on a button. A window pops open, once installation has been completed, informing the user of changes to the software. These can then be printed out and kept by the user as an addendum to the 230 page manual which comes with software.

Non functional needs

All this functionality is well and good but it needs to be backed up by non functional attributes. Reliability has to be the most important of these and is something which we have sorted with RISC OS. A reliable GUI system with equally reliable hardware.

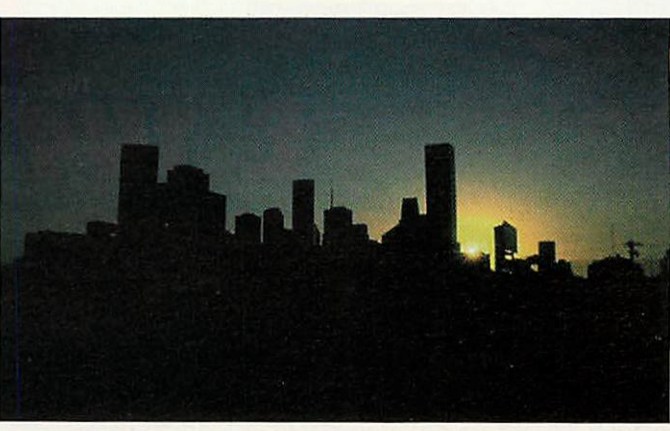
Regular upgrades is another. As I've just mentioned these tend to be once a week at the current rate of development. With the software constantly receiving new functionality existing users are kept happy. What's more the people get asked what they actually want, on a regular basis — not just when we decide to do a survey. A proper process is in place for the reporting of bugs and suggestions; from the customer, through the reseller and local distributor to the development team. All requests are prioritised and constantly reviewed.

Customer service is a top priority with support for everyone all the way along the supply chain. Users, resellers and distributors all know who they can contact if they have a problem. Close ties between the distributors, resellers and the development team ensure that everyone is kept up-to-date on the latest developments in the POSum project.

Marketing

Having a good product is one thing, marketing it properly is quite another. At the moment we are carefully establishing a distribution network for the POSum brand; this is something which needs to be done slowly and carefully, and not rushed. With such high expectations of everyone onboard it's important that the people who we have on the team are the right sort of people.

Each country, or region, has it's own distributor (currently we have distributors established in the UK, Australia, The Netherlands and New Zealand with Germany and France as possibles for the near future). These distributors assemble POSum systems for distribution in their assigned territory to Registered POSum Resellers.



The distributor appoints resellers, at its own discretion, based on certain rules which it is bound to by contract. Resellers are expected to uphold a high degree of standards in their business operations. These ensure that only the right sort of people get to sell POSum systems.

The future

The software will continue to be developed at the same pace as it is today. New customers mean more sales, which means more revenue and more funding which can be put into marketing and further development. Things take time and they move slowly, but that's the nature of the beast.

We must have patience. POSum is a long term project and each day we get closer to our goal — RISC OS dominating a market where others have failed so miserably. Time brings with it more distributors and more resellers. New developments bring with them new markets — more modules to open POSum to a new crop of customers. More customers spread the word. Distribution spreads even further and we conquer new ground and so POSum becomes a standard.

This is the future I see. Here's to it. END



How do you eat yours?

Ease the burden with a cornucopia of goodies - Pam Turnbull logs on to jellybaby.net

Having spent four hours hunting for images, scanning and DTPing a set of activities for an hour lesson because the school budget wouldn't run to buying the things I wanted and a stern note from my bank manager reminded me that buying them myself wouldn't be a smart move, I decided that there had to be more to Sunday afternoons! Then out of the blue came an e-mail recommending a site of goodies for teachers of all sizes and varieties.

Now don't get me wrong, I think the Web is a superb resource and I'd be lost without it, but the number of shallow or pointless educational (which are often school-based) sites I wade through has tarnished its sheen. But ever the optimist, I logged on ...

ROSES aka RISC OS Education Resources has two things going for it before you look past the pretty logo - it's aimed at the UK and the resources are all for Acorn machines.

At a second glance I forgave the black background and unimaginative layout as this is a practical site which shows you what it's got without coyly hiding behind animated GIFs and the like.

On to the meat

http://rougol.jellybaby.net/taught.html is hosted by ROUGOL - RISC OS Users Group of London - the idea is to support teachers with RISC OS computers at home or in school and you are encouraged to reciprocate in kind by submitting your own worksheets, resources or programs. As with any Web site it is only as good as how often it is updated and so do send you own gems along. You can easily see new items are these are always highlighted in red.

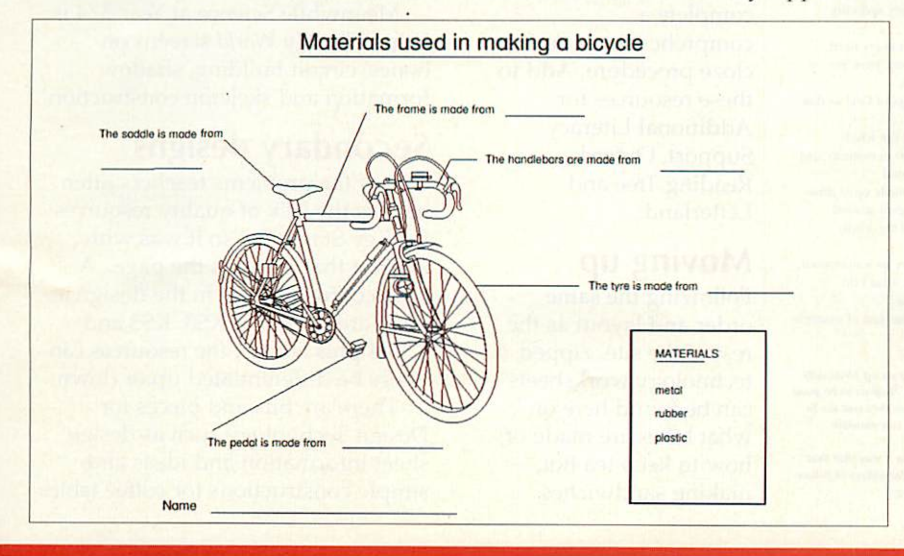
Content is segmented by key stage and is then further catalogued by subject area. In addition the first thing you see is a selection of general files. For instance an Impression document is conveniently zipped but will reveal a 2002 calendar over 12 pages with two sides - his and hers - which you can edit to suit.

Then I hit the jackpot - my favourite CD-ROM of clip-art having recently departed to that big disc pile in the sky I am still grieving for quality images on a range of subjects. Zenta produce a good range of CD-ROMs on everything from fonts, to clip-art, photos of the British countryside to audio samples, and here they have a link to their site and to free images which you can download preview and use.

For instance, you can access birds, animals, construction images, space and sci fi, as well as sports and that's just from their CD Big Clip Art Collection. Though this is in truth an advert it is worth a visit if you're struggling to find that one image you need as the drawfiles are well drawn and coloured.

In addition there is a useful group of CSV files on birds, crooks, monarchs, ships and even volcanoes. Data which can take ages to find and input but here it is ready to put straight into databases, spreadsheets or programs such as *Tablemate*. Definitely an area which could and should be easily developed.

Finally in this section are two useful programs which you can never find when you need them, in particular Paul Vigay's *WordSearch* which does what is says on the sprite, by generating wordsearches which can then be popped into your preferred DTP program. Similarly Victor Markwart's *GrphPaper* lets you produce printable graph paper (including logarithmic and polar) and has saved my bacon many a time.



NAME	BORN	ACCESSION	LENGTH OF REIGN	EVENT1
Egbert	802	827	12	
Ethelwulf		839	19	
Ethelbald		858	2	
Ethelbert		860	5	
Ethelred I		865	6	
Alfred the Great	849	871	28	Founded schools/ Anglo Saxon Chronicle
Edward the Elder		899	25	
Athelstan	895	924	15	United England under one ruler
Edmund		939	7	
Edred		946	9	
Edwy		955	4	
Edgar the peaceable	944	959	17	Peaceful times
Edward the Martyr	961	975	3	
Ethelred the Unready	965	978	38	Massacre of St Brie's Day
Edmund II (Ironside)	981	1016	.5	
Canute	994	1017	18	Danish 'empire'
Harold I		1035	5	
Hardicanute	1019	1040	2	Danegeld
Edward the Confessor	1003	1042	24	Built Westminster Abbey
Harold II	1022	1066	.3	Battle of Stamford Bridge
William the Conqueror	1027	1066	21	Domesday Book

Overtures and beginners

There are some very nice extras available for Key Stage 1 on this site from *MyWorld* files to design a garden or a Christmas tree to ARM'd Teddy, a drawfile teddy bear for Year 1 D&T, (QCA unit 1a - Moving Pictures) which focuses on mechanisms and uses paper fasteners and pivot points.

TextEase users will find pages for Reception and Year 1 such as days/months for display, word games, book reviews, and a mass of worksheets on words, letters and so on with a Literacy bias. For other areas such as History there is a drawfile to sort of old and new things, while a further drawfile draws on number recognition skills as you join the dots - 1-10 produces a penguin.

Or how about a simple balloon colouring exercise (1 and 2 counts) with number lines; simple number shape addition; bear colouring subtraction and more number line work all using TextEase. Staying with Maths, and for those of us searching for oral starter ideas for the Numeracy Hour, there are drawfiles for sharing, sequencing, more/less, missing numbers and doubles.

I particularly liked the *My World* screens supporting data handling for hair, toys, jellies and eye colours.There are other *My World* screens to covering the pets you would like to have, and logic blocks/colour shapes to be categorised. Science is supported too with a drawfile of 'Things We Eat' which is a sorting exercise while there is one archive dedicated to drawfiles on growing, levers, light, materials, plants, senses and water.

The majority of the *My World* resources here come courtesy of Deal Parochial School in Kent. Links to their Web site provides you with glimpses of resources for the whole curriculum and download buttons to access them yourself.

For science they provide a set of activities for Year 1 on Materials based on *My World*. Asking children to look at opacity, translucency, transparency, solids, liquids, gases, it also provides a timeline of material use and a crossword.

For Literacy there is a series of screens based on spelling patterns where children form words and then use them to complete a comprehension-cum-cloze procedure. Add to these resources for Additional Literacy Support, Oxford Reading Tree and Letterland.

Moving up

Following the same order and layout as the rest of the site, zipped technology worksheets can be found here on what bikes are made of, how to keep tea hot, making sandwiches among others. Aimed at Key Stage 1 as well they work with Year 3 too.

For English there is an Impression activity to put the speech marks in 'The Pied Piper' plus a drawfile where statements requiring the addition of words: who, here, where, when, and so on.

History buffs will find two Tudor resources - one a *My World* activity and another a timeline display featuring the important dates, events and monarchs. A shame this as I'd have expected more resources from World War II as well as from the Greeks and Egyptians.

Year 6 are singled out with a LOGO worksheet, but there are also *Textease* and *Advantage* resources for Key Stage 2 ICT. For instance, a Year 4 activity uses textease to produce a simple scene using colour tool, shading, tints and direction of shadows. Other activities cover Screen Turtle, function boxes within *Advantage* and word pictures.

And so to maths and a Magic Square Generator to create 3x3 magic squares and drawfiles to put them in, as easy puzzles to complete! Plus drawfiles for making solid recognition/classification sheets and function machines in Impression which divide by 2, 5 and 10. One of my favourite maths resources for Year 3/4 is the Castle Adventure which is an investigation encouraging children to record logically and progressively and comes courtesy of Deal Parochial again and utilises *My World.*

Meanwhile Science at Year 3/4 is helped by *My World* screens on bones, circuit building, shadow formation and skeleton construction.

Secondary designs

One of the problems teachers often have is the lack of quality resources for Key Stages 3-4 so it was with interest that I turned the page. A little confusion here in the design as there are pages for KS3. KS3 and KS3-4 plus a lot of the resources can easily be differentiated up or down.

There are bits and pieces for Design Technology such as design sheet information and ideas and simple constructions for coffee tables

THEME: Responsiblity

How do you bring up children properly?

It's an old, old question - older even than the Bible.

If all that has been written about it by doctors and preachers and educationalists and psychologists and others, were gathered together, it would make an enormous library.



But that shrewd humorist, Josh Billings, put it all into a few words.

Said he - To bring up a child in the way he should go, travel that way yourself. And there you have it.

BIBLE VERSE

Therefore go and make disciples of all nations, baptising them in the name of the Father, the Son and the Holy Spirit, and teaching them to obey everything I have commanded you.
Matt 28:28.

REFLECT

Jesus said a lot about children. He said we should treat them very specially indeed.
We should care for their every need, teaching them so that they grow in knowledge and wisdom.
Teaching them the things of God so that they grow spiritually.
He was concerned with the whole person, that people grew to maturity and fulfilled their full potential.
The Bible says we are made up of three parts, body, mind and spirit and we should take care to feed the whole person.
The example Jesus gave us was himself, he said,"Follow me, do what I do, become a disciple of me."
I guess we must ask what sort of example am I to others.

Dear Father in Heaven,
Help each one of us to grow up physically, mentally and spiritually. Help us to be good examples to others so that they can see in us good things that they can emulate (copy).
May each of us behave in a way that that will set a good example for others to follow.
In Jesus's name, Amen

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http://www.surftec.net/

Year 3 IT		
Content	Activity	Resources
Using Dazzle the children try to produce a self portrait. Making use of a mirror they can either try a full face or an angled side view. If this proves difficult, try a friends face. Skills: Observation mouse control use only limited set of tools	After talking a little about length of nose, where the top and bottom of the ear comes in relation to other features etc., the children have a limited time (maybe ½ hour) to produce their own portrait. Making use of pencil, very small brush and magnifying glass, can they produce a drawing? They must concentrate on drawing the lines first/getting shape and size about right, then add colour. These can be printed out and displayed alongside a photograph if it can be obtained. This hair was coloured in and then drawn over in black otherwise filling in the colour would have been a long process.	Dazzle Mirror/friend Links: Art - Observational and self portrait D&T / History- My Family Assessment opportunities: Can they control the mouse reasonably well? Do they look for details and use the magnifying tool to aid them?

and moving toys. When it came to maths the resources are a little thin on the ground though there are useful utilities such as Simon Weaver's *Equs* which is a simultaneous equation calculator, or Paul Johnson's *LinReg* which is a linear regression tool. Yet you can make a dodecahedron 3D calendar or use DrawPlus or Vector to build up regular square patterns.

I was similarly disappointed by quantity of support files for Modern Languages. Although the PD and shareware applications are well worth a look such as *Lingo Master* by Nigel Caplan which certainly helps with French, German, Italian or Latin. While *Say It* from M.D. Smith is a basic multiple language tutor with sound samples for Spanish, French, German and Cantonese.

However, one of the best aspects of the Web is when something out of the usual turns up. In this case, fifteen zipped Impression folders on subjects such as trust, senses, illusion, sharing and truth. With a Christian bias these will give you all you need (minus the hymn) for a series of assemblies on a particular subject.

Science is an area which perhaps lends itself best to the Web and here are some nice extras. For biologists there are drawfiles of the: Adrenal, Arm, Circulation, Digestion, Excretion, Reproductive, Nervous and Respiratory systems. Plus a prompt sheet for investigating the strengths of stomach powders.

Moving on to Chemistry you can try your hand at a worksheet on acid rain or a couple of jigsaws and learn how compounds are formed from common elements and free-radicals as well as applications to model and display molecules - RASMOL as well as a thermal eliptoid program, RMM calculator, a wave function plotter and a element data program including a quiz and *Structurer* by Daniel Barron.

This will name a given compound when you create it on screen and comes as a Java or BASIC program. Definitely worth a look are two complementary graphical databases: *Nuclides* contains information on over 3,000 known stable or radioactive isotopes; while *Elements* contains information on all known elements and their isotopes up to element 118 displayed on a Segre chart.

The best selection is for physicists who can ring the changes with energy wordsearches, ray diagrams, moon phases and spring/neap tides *Impression* documents as well as details on comets, or try out the planetary orbits *Textease* worksheet or an *Impression* design to assess thermal energy transfer and insulation knowledge.

All zipped or squashed there is a Basic Magnetic Fields with iron filings practical, a DIY Telescope, Sound Test and Quick Electrostatics Test among others on cooling which can use datalogging sensors or standard thermometers. Software is available too from demos courtesy of Glasgow University to a multimedia presentation on Bells and Bell Ringing.

Top of the tree

Finally for those involved in the A-level syllabuses there are a number of science activities some of which duplicated from the Key Stage 3/4 selection but still very much appropriate - such as *Nuclides*. But in addition there are drawfiles of the 14 Bravais lattices, and the structure of diamond. While an Impression document lists the six SI units, with their precise definitions. However, I rather liked the quick *Textease* experiment on the loading and unloading of a rubber band. Includes an embedded *TableMate* table for results and leads to a basic hysteresis plot.

Add to these *Impression* and *Easiwriter* documents covering dimensional analysis, stress/strain summary, prefixes, standard form and SI units. As well as SHC tables, Newton's Inverse Square Law, Speed of Sound (closed pipes), End Corrections, SHM and so on. Well worth downloading.

I was pleased to see experiments included here and this time the instructions are saved as *Impression* documents, whether you're interested in Beta and Gamma, Magnetic Fields, Mass on Spring, N2L, SHM spreadsheet, Resistance, Polarisation, Resonance, Standing Waves, or SHC.

Finally software tools are provided. These are Basic applications: Alpha Particle Scattering, Amplitude Modulation, Beats and Adding Harmonics.

Playing your part

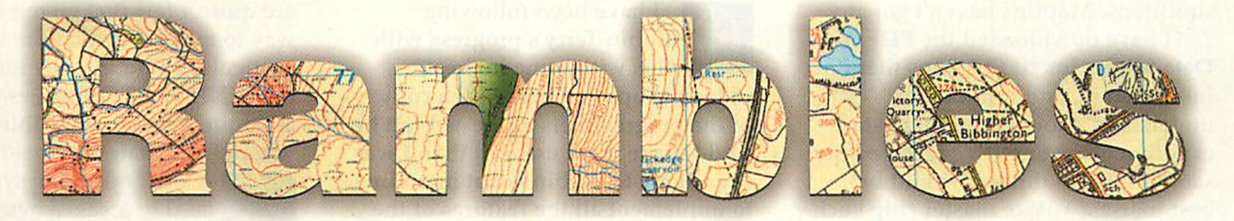
Although there is an emphasis on science resources, especially as we journey up the education ladder, I was glad that core subjects don't take all the limelight. Although there is a lot here, there must be much much more out there on people's hard disks and I know that I have such documents lurking on Zip discs. Furthermore, it means that the four hours I spent on creating resources may well not be wasted and might save someone else a frustrating Sunday in future! END

Product details

Product:	ROSES
Ages:	5+
Price:	FREE - although some shareware applications will need to be registered
Supplier:	RISC OS User Group of London
Web:	http://rougol.jellybaby.net/taught.html
E-mail:	info@rougol.jellybaby.net OR harmsy@freeuk.com



RISC OS



Mike Cook buys another round for RISC OS users

Not a lot of questions but there are a lot of words so lets start off. You might remember Robin Hampshire from about a year or so back. He was then looking to make an energy efficient controller for his central heating. Now having been successful with this he wants to take it further, he writes:

Q **"I would like to experiment with some 1-wire devices, and recall that you had a series of articles on them in *Acorn User* not long ago. Unfortunately I have mislaid the URL of your article archives — could you let me know where to find the necessary, please?**

"Also I was interested to read the letter to you from Graham Stewart in a recent *Acorn User*, as I would also like to learn more about the serial port. I do have the CD set of the PRM's, but they seem to assume a relatively high level of knowledge before you start. Either that or else I'm not looking in the right place. The descriptions of the OS_Byte and OS_SerialOp SWI's in Chapter 38 are full of jargon that I can find no explanation for.

"Where can I go to find instructions that begin with the assumption that the reader is a complete and utter novice? I already use several incarnations of IIC bus devices thanks to your previous guidance, so I should be able to get there eventually, but sorting out the black arts of the serial port seems rather harder than the IIC."

A My article archive is **www.doc.mmu.ac.uk/library/Acorn/RTR.html** However, it does not contain the 1-Wire bus articles as they only go up to Aug 99. The articles you want are more recent and unfortunately these later articles are not available on line.

It would help me if you could say exactly what jargon you don't understand in the PRM as to me it seems quite straight forward, well I suppose it would. However, as the hardware for the serial port is common to all computers information is plentiful on the Net. Use these links to gen up on the jargon and then go back to the Programmers Reference Manual and I think you will find it all makes a lot more sense:

www.arcelect.com/rs232.htm
www.sangoma.co.uk/signal.htm
www.rs485.com/rs485spec.html
www.ucl.ac.uk/~ucapwas/rs232.html

Robin soon replied to this and said:

Q **"Many thanks, Mike. I've now downloaded them all and shall study. From first glance it looks as though they are precisely want I have been looking for. I thought I should keep you up to date with what I'm doing, and also, to ask you for further help.**

"As you know, I originally developed a central heating control system using the IIC bus, with your help. Although you had mentioned that the 1-Wire bus would be more efficient, I decided to use the IIC as I needed it to be operating uninterrupted, whilE my serial port, even with a switcher, is just as permanently clogged up with modem for phone, Arcfax and Internet.

"The IIC system actually works very well — all the IIC chips are close by the computer in a control box on the wall, and data lines run from there to temperature sensors and 12V radiator valves.

"The sensors are of my own design — LM35DZ chips which output a steady 10mV per degree C. I amplify the reading by approximately 10 at the sensor and send that back to PCF8591 A/D chips. I even have two sensors outside to give me outside temps, one on the North facing eaves, one on the South.

"However, recent developments have made me think about converting my system to the 1-Wire bus. I have been influenced by the following aspects:

"First I will soon be buying a second computer, and instead of getting rid of this one will be setting up a home network. Thus a serial port will become free. Next I want to make use of the Dallas 1-Wire weather station, now made by AAG in Mexico and it would be nice to incorporate that in the same system.

"Also Dallas is developing a humidity sensor (DS1910) which would be a great improvement for my system, especially as I live in a Grade II listed farmhouse made of cob, oak beams et al. Initially, I could use these to monitor the atmosphere in the house, and later maybe develop an automatic humidity control system.

"I understand Dallas are similarly developing an atmospheric pressure sensor, which again would be nice. Finally when I put in the cabling, I allowed for future changes of this sort, so other than purchasing the bits and pieces, and mastering the software, I should be able to do it.

"Now, here come the questions:

"Where do you get your supplies of components from? RS only has the DS2480 and DS1820, whereas the

2480 has been superseded by the 2480b and the 1820 by the 18S20. I have been in touch with Dallas UK (0800 585048 — from their USA Web site) and they are happy to send me samples of some of the chips, but can't help when it comes to buying a dozen or two — they only deal in squillions. Maplins haven't got any.

"I have downloaded the PDF Data Sheets for all the chips that I'm interested in, and think that I understand enough of it all to start experimenting once I've received my samples. I also think it would be best to use a 1-Wire master chip such as the DS2480b rather than drive the components directly, especially as I shall be wanting to multitask the eventual application.

"However, the wiring diagram for a 12V RS232 port is rather scary — I presume you've looked at it in your researches — is there any way a layman like me can simplify it? Many thanks for your help."



The electronics industry is a fast moving one with components becoming obsolete even faster than ever, even Dallas have been bought out by Maxim in the last few months. Their Web site **www.dalsemi.com** is a whole treasure trove of data sheets and application notes and well worth a visit.

I got all the components for my articles from Farnell, the DS1820 is still in their catalogue but it is marked up as only available until stocks are exhausted. However, the DS1821 could be used as a substitute but check the data sheet for the differences, I think it can't be used in the passive power mode and has to be supplied with a separate 5V supply. The DS2405 addressable switch however is still available.

There were some devices I wanted to use, like the DS2450 quad A/D converter the DS2502 controller and DS2415 real time clock, but I had to hold off with them because I couldn't find a supplier. I never considered using the DS2408 as this is just a line driver and you wouldn't really need one just to cover the distances in a house.

However, if you are worried get Application Note 108 from the Web site, that shows you how to drive longer lines with a few components. Your best bet for a source of components is to get an electronics magazine and see the component distributors in that. As to the diagrams in the data sheets looking scary, these do tend to be over-simplified so there is not much scope for simplification here. Best of luck with your project.

Next up comes David J. Barton who has some comments about *Ample*:



"I have been following Robin Terry's progress with this with some interest, indeed I supplied him with a copy of the programmers guide as I felt he could make more use of it than I was ever likely to. Robin is not intending to implement all the features of the original *Ample* and has no plans to support the hardware.

"I was given a program to extract an image from the Ample ROM which could be loaded into sideways ram on my BBC Master so it loaded modules as needed but faster than from the ROM. Is it possible to run this on a Risc PC under the emulation program?

"If it is would it also be possible to connect the Music 5000/4000 set-up to a Risc PC via a 1MHz bus and user port, which I think I remember being available. If this is possible why no one has done it yet? Am I being too optimistic? I would love to be able to use the hardware I still have without connecting up the Master and save some space."



Robin works only six rows away from me here at Pace so we keep in touch. There is no reason why you couldn't use the Music 5000 hardware on a Risc PC through a 1MHz bus interface card, assuming they are still available. I have an original Acorn one, and I know there were others but I am not sure if they are still being made.

The software however is an other matter and I am not as sure about this. The idea of running a module through the emulator is sound enough but it all depends on how the code in the module has been written. There are some programming tricks that the emulator can't pick up, mainly concerned with interrupts and direct addressing of the hardware of the bus.

So until you try it you won't know but it could be that the module code would have to be tweaked and without the source code this could be tricky. As to why no one has done this before I think you are being a bit optimistic about the level of interest in this product, it didn't sell too well despite being excellent. In general I think the people who could do this simply don't have the hardware or interest.

Finally a question from Peter Fynn:



"I have been reading the Programmers Reference Manual and I find that there are quite a few that go out of there way to make it difficult to use. In particular I find that the instructions that AND and EOR values together are quite incomprehensible, could you put me straight please?"



A lot of operating system calls need to access a byte or bit pattern to switch control. Now if you only want to change one of the bits and leave the others alone you would normally require two calls, one to read the bit pattern, you then modify it and need another call to write the new value.

The fewer calls or hooks you have into an operating system the smaller it is and easier to maintain so this trick was thought up to not only remove one call but also do your bit manipulation for you. Typically it looks like this:

```
New value = (Old value AND R2) EOR
R1Where R1 and R2 are registers.
```

What you need to do is a bit of pen and paper work here to find the value you want to put into the two registers but if you consider just one bit it is quite simple:

- If you want to place a zero in a bit in the new value then R2 and R1 should both contain a zero in the corresponding bit.
- If you want to place a one in that bit then R2 should contain a zero and R1 should contain a one.
- If you want to leave the bit alone then R2 should contain a one and R1 should contain a zero.
- Finally if you want to invert the bit then put a one in both R2 and R1.

That does sound complex just reading it out but write it down with each rule on a separate line and try it out. For example suppose you know what bit pattern you want then make R1 equal to that bit pattern and R2 equal to nought or all zeros. This is because a bit is controlled by R1 if the bit in R2 is zero. When you have the bit pattern you want, you could express it as a decimal but it is much easier to use hex. END

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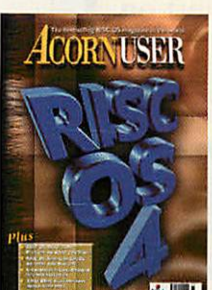
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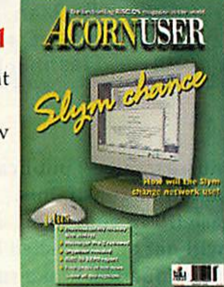
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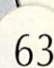
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Coming around

I have recently taken up a subscription to *Acorn User* after having bought the occasional mag from newsagents in the past. I am a little disappointed that there are no longer any cover discs — as this was one of my principal driving forces in buying *Acorn User*, and there doesn't seem to be that much on the Online CDs.

I appreciate that the current Acorn market has contracted a little, but am very pleased to see all the adverts for companies still selling Acorn products, and that rather than completely evaporating, the Acorn market is beginning to re-expand after Acorn's decision to abandon computers. I had been in the 'wilderness' thinking that with Acorn Computers closing their business, this would make the market for these 'real' computers disappear.

In (what I thought) would be a vain hope I started posing a few questions on the Acorn newsgroups which had been set up by my *Voyager* software and was amazed at the amount of support and information for the Acorn still out there. Through that I have made some good contacts, and feel rewarded that I wasn't the only one not to have deserted Acorn.

I program PCs for a living, and through this am greatly aware of their shortcomings. Microsoft *Windows* is an incredibly awkward and unwieldy operating system, and Microsoft *Word* is possibly the hardest 'pseudo DTP' program I've used — it even struggles with the simple things. Throughout my working day I am lamenting not using a reliable operating system like RISC OS, and I have never sworn at computers like I swear at PCs.

I learnt to program in BASIC on the family's BBC Micro Model A (upgraded to 32K), and received a perception of how a computer system should work after that. Apart from an extremely flaky first BBC Micro which we had replaced. I have had next to no trouble with Acorn systems.

Envying the early pricey Archimedes series, the next family computer was a BBC Master to which I added a PC 80186 Emulator board and took the memory to the dizzying heights of 512K. It wasn't until I was working for myself that I could afford to buy one of the Archimedes series — an A3010 and my first experience with a mouse! I upgraded that with the local Acorn dealer's hard disc kit — HCCS Micropodule system and fitted a Digitiser. Are any of these still around?

I then moved 'down south' and a colleague at work offered me a Risc PC which I bought from him in instalments. He subsequently abandoned Acorn and is exclusively programming PCs.

I fitted my Risc PC with a switch box in order that I could share monitor and keyboard with other PCs I had. One day on switching 'live' between PC and RISC PC — the Risc PC just 'hung'. I tried rebooting but nothing happened. "Oh no! I've lost my only decent computer!" I thought. I enquired on the ARM Club support e-mail address and to my amazement somebody who'd helped me before responded saying to contact a company called Reflex Electronics (**www.reflexelectronics.f2s.com/index.php**).

Reflex were great. They part-exchanged my motherboard for £95 and returned it to me within two days — just before Christmas. I also bought a second-hand A7000+ as a back up machine for £150 (complete with keyboard and mouse) from Steve Picton at IFEL (**www.argonet.co.uk/ifel**) who occasionally sells second-hand Acorns — and did sell some A3000's for £20.

I now link all my machines through the switch box (but switch each off before switching — to avoid damage) and use STD's PS/2 Mouse connector which is brilliant.

I would like to suggest that you have a beginner's guide to the ins and outs of RISC OS. I (and possibly others) missed out on learning the basics on RISC OS due to late purchases of A3010 and Risc PC. I have tried trawling through old issues of ARM Club magazines and found some gems, but know there's still more. I remember avidly typing code in from Beebug magazines.

I am still totally committed to the Acorn — I have only one real criticism of RISC OS — that it has no keyboard support as standard — *Windows* can be used through the keyboard, but RISC OS cannot without additional software — but compared to Windows it is so easy to use.

Andy Burgess
by e-mail

In fact the "Online CDs" are not intended to be that at all, from now on you should be getting that technical help you want through the new section on the Acorn User Web site. We had not intended to include more basic material but it seems that many people do want it so watch out for all the new goodies as they appear with future issues.

Confused? You may be

I read Paul Middleton's article and letter with interest in the last edition of *Acorn User* and it left me a little bewildered as to where RISC OS was going.

My confusion lies in their not developing a 32-bit version of the operating system. Paul stated that unless a hardware developer committed to building a 32-bit computer, there was no point in creating the 32-bit operating system, and I can understand this. But then I remembered the Omega. Hasn't the Omega been designed to take a 32-bit Xscale chip? And wouldn't that require a 32-bit version of RISC OS?

But then Paul also stated that simply having a 32-bit operating system wasn't enough — all the software had to be 32-bit, and software developers would have to

recompile or rewrite their software to work on a 32-bit computer. The problem then became clearer and I realised we were talking about a very vicious circle as follows:

• Microdigital have a computer that can take a 32-bit Xscale chip but can't run any software on it as there is no 32-bit RISC OS operating system available.

• RISCOS Ltd want some commitment before they begin to develop a 32-bit version of the operating system, but they won't find any serious commitment because, without any compatible software, no-one will purchase a 32-bit computer (the Omega) and therefore the new operating system won't sell either.

• Software developers have no incentive to convert their software to 32-bit. Even if they wanted to, they do not have access to a 32-bit computer with the necessary 32-bit operating system in order to test their software and, more importantly, develop new applications.

In this situation it quite simply will never happen. Someone has to take the first step, and I believe the Omega is the ideal platform on which to do so.

Because the Omega comes with a StrongARM chip built in and can take the Xscale as a second processor, it provides both 26-bit and 32-bit environments. If RISCOS Ltd made the commitment and produced a 32-bit version of their OS for the Omega, then RISC OS users would have access to both 26-bit and 32-bit desktops.

How this is implemented would have to be worked out — at best one system could run in a window in the other (in the same way the PC emulator works), but at worst there should be a choice between the two at boot up. Microdigital would sell their Omega with both operating systems included, and RISCOS Ltd would make their money.

Users would purchase the computer (I know I would) because it solves the vicious circle — I would have a computer I can use today that will replace my current Risc PC / A7000 / and so on transparently(ish), and I can also use 32-bit software as it becomes available.

Software vendors would then have a platform and a customer base as an incentive to begin converting their software. In fact, if I'm not mistaken, I believe I've read many software products already stating that they are 32-bit ready. If I'm correct, then there are quite a few software packages that would be converted quite quickly.

It may be a hassle to have to close down and reboot the computer to use the 32-bit version of any software (if this is the only choice), but a lot of applications will require the speed of the new Xscale chip while others will be a delight to use compared to their 26 bit version, making the reboot worthwhile.

Photodesk currently causes me problems because of the limitations of the current processor, and I read that to take full advantage of Cerilica's *Vantage* you need a faster processor. I'm sure these two applications would be converted quickly, and no one would hesitate to reboot their computer in order to use these packages.

The downside to this progression is that 26-bit software would be on its way out, and in due course, in order to upgrade current software, you would require a 32-bit computer. This could cause an impact within certain establishments such as schools, and so on.

However, as new software takes advantage of 32-bit processors, chances are that the old 26-bit processors will simply be unable to cope with the upgrades, and the purchase of a new computer would be unavoidable. I already find that I can't use much of my current software satisfactorily on my A7000, and even my Risc PC SA seems to struggle. I believe that even the Kinetic processor would not be able to satisfactorily cope with a 26-bit version of any 32-bit software that takes advantage of the new Xscale processor.

Having said all this, if none of it is possible, then RISC OS will continue to work on processors that support 26 bit modes. I have only heard of the Xscale chip which is 32-bit. Are there any other fast processors being developed that provide a 26-bit mode that we can use? And if not, what is the future of RISC OS desktops?

Jimmy Imossi
by e-mail

You have summed up most of the situation quite well. The Omega does break the circle and, yes, there is software that is 26/32-bit compatible and the guidelines exist to make all code compatible with both.

The only things that need to be added are that currently there is no production Omega (at the time of writing) and one might understand that RISCOS Ltd aren't going to pursue development until there is one.

Making the most of it?

Very interesting article, 'Making the most of it' from the November issue of *Acorn User*. Old Acorn machines are indeed still very useful (and usable).

However, I totally disagree with Matthew Price's opinion that sticking with old Acorns, picked up for next-to-nothing from private sellers or schools, doesn't harm the market. He says that "the fact that so many people are buying old Acorns which even after a decade still work is a testament to Acorn's great designs". Well it is a testament to that, but how does that show it doesn't damage the market?

Acquiring a machine off anyone but a dealer means no cash for the manufacturers and the Acorn shops. Buying an old Risc PC and sticking in a Kinetic card would be the best way for a "poor student" to acquire the latest Acorn technology. If you can afford a PC, you can afford that and it gives at least some support to the current market players.

Michael Stubbs
by e-mail

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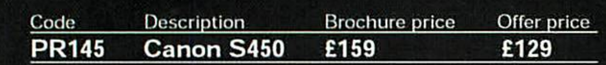
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